

2009 Explanatory Notes  
Animal and Plant Health Inspection Service

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## ANIMAL AND PLANT HEALTH INSPECTION SERVICE

Purpose Statement

The Animal and Plant Health Inspection Service (APHIS) was established by the Secretary of Agriculture on April 2, 1972, under the authority of Reorganization Plan No. 2 of 1953 and other authorities. The mission of the Agency is to protect the health and value of American agriculture and natural resources.

Together with our customers and stakeholders, APHIS promotes the health of animal and plant resources to facilitate their movement in the global marketplace and to ensure abundant agricultural products and services for U.S. customers. APHIS strives to assure its customers and stakeholders that it is on guard against the introduction or re-emergence of animal and plant pests and diseases that could limit agricultural production and damage export markets. At the same time, APHIS also monitors and responds to potential acts of agricultural bio-terrorism, invasive species, diseases of wildlife and livestock, and conflicts between humans and wildlife. The Agency also manages and resolves sanitary and phytosanitary trade barriers and addresses certain issues relating to the humane treatment of animals. Finally, APHIS ensures that biotechnology-derived agricultural products are safe for release in the environment.

Our mission is carried out under five major areas of activity, as follows:

Pest and Disease Exclusion -- The pest and disease exclusion programs prevent the introduction of foreign plant and animal pests and diseases. APHIS monitors plant and animal health throughout the world and uses the information to set effective agricultural import policies. APHIS and the Department of Homeland Security cooperate to ensure that these policies are enforced at U.S. ports of entry.

APHIS also develops and conducts pre-clearance programs to ensure that foreign agricultural products destined for the United States do not present a risk to U.S. agriculture. APHIS engages in cooperative programs to control pests of imminent concern to the United States and to strengthen foreign plant protection and quarantine organizations. APHIS also certifies plants and plant products for export to the United States and regulates imports and exports of designated endangered plant species. APHIS assists U.S. exporters and the Foreign Agricultural Service in revising foreign plant and animal import regulations to encourage and increase U.S. agricultural exports.

The statutory authority supporting this program area is contained in 7 U.S.C. 166, 450, 1531-1542, 1581-1610, 7701-7772 and 8301 et seq. (Animal Health Protection Act of 2002); 18 U.S.C. 42; 19 U.S.C. 1306; and 21 U.S.C. 102-105, 111-120, 121-123, 127, 131, 135- 135b, 136, 136a-f, 612-614, 618, and 620; 45 U.S.C. 71-74, and 46 U.S.C. 3901-3902. The principal legislative authorities for these activities include the Plant Protection Act of 2000, Sections 12-14 of the Federal Meat Inspection Act, and the Public Health Security and Bioterrorism Response Act of 2002, P.L. 107-188 Section 211-231. The Department's enforcement responsibilities for endangered plants are contained in the Endangered Species Act of 1973.

Plant and Animal Health Monitoring -- The plant and animal health monitoring programs are largely cooperative efforts involving the Federal and State governments, and industry. APHIS conducts programs to prevent communicable plant and animal diseases of foreign origin from entering the United States. Upon entrance into this country, the pests and diseases are rapidly

diagnosed. The Agency also carries out surveys in cooperation with the States to detect harmful plant and animal pests and diseases. The programs also help determine if there is a need to establish new pest or disease eradication programs.

The statutory authority for this work is contained in 7 U.S.C. 391, 450, 1622 and 8301 et seq. (Animal Health Protection Act of 2002); and 21 U.S.C. 111-112, 114, 114b-114c, 114d-1, 117, 127, 134e, 608, 610, and 620. Principal legislative authority for these activities is contained in the Act of May 29, 1884; Act of August 30, 1890; Act of February 2, 1903; Act of March 3, 1905; Act of June 17, 1930; Act of September 21, 1944; Act of February 28, 1947; Act of September 6, 1961; Act of July 2, 1962; and Public Law 97-46 of September 25, 1981; Act of October 14, 1982; Act of January 13, 1983; Public Law 99-198 of December 23, 1985; Public Health Security and Bio-terrorism Response Act of 2002, Public Law 107-188 Section 211-231.

Pest and Disease Management -- In cooperation with the States, APHIS conducts programs to detect, prevent, and eradicate pests and diseases that are harmful to agriculture. The Agency monitors and regulates interstate shipments of plants, livestock, and related materials to prevent the spread of disease and the distribution of impure, unsafe, and nonefficacious materials and products. Through the Wildlife Services program, APHIS protects agriculture from detrimental animal predators through identification, demonstration, and application of the most appropriate methods of control.

The statutory authority for this work is contained in 7 U.S.C. 281-286, 429, 426-426-b, 450-450f, 851-855, 1624, 3801-3813, 7701-7772 and 8301 et seq. (Animal Health Protection Act of 2002); and 21 U.S.C. 115-130, and 134-134h. Principal legislative authority for these activities is contained in the Animal Industry Act of May 29, 1884; Act of August 30, 1890; Act of February 2, 1903; Act of 1903; Act of March 3, 1905; Tariff Act of June 17, 1930; Act of 1931; Act of September 21, 1944; Plant Protection Act of 2000; Act of February 28, 1947; Act of September 6, 1961; Act of July 2, 1962; P.L. 92-629 of January 3, 1975; the Swine Health Protection Act of October 17, 1980; Public Law 97-46 of September 25, 1981; Act of October 14, 1982; Act of January 13, 1983; Public Law 99-198 of December 23, 1985; and the Public Health Security and Bioterrorism Response Act of 2002, Public Law 107-188 Section 211-231 and the Food, Agriculture, Conservation, and Trade Act (Farm Bill) of 1990.

Animal Care -- The Agency conducts regulatory activities to ensure the humane care and treatment of animals and horses as required by the Animal Welfare Act (AWA) of 1966 as amended (7 U.S.C. 2131-2159), and the Horse Protection Act of 1970 as amended (15 U.S.C. 1821-1831). These activities include inspection of certain establishments that handle animals intended for research, exhibition, and sale as pets, and monitoring of certain horse shows. The Agency is reviewing public comments regarding the advance notice of proposed rulemaking to extend coverage under the AWA to rats, mice, and birds not involved in research.

Scientific and Technical Services -- APHIS develops methods to control animals and pests that are detrimental to agriculture, wildlife, and public safety. The Agency's regulatory structure brings the benefits of genetic research to the marketplace, while protecting against the release of potentially harmful organisms into the environment. APHIS also conducts diagnostic laboratory activities that support the Agency's veterinary disease prevention, detection, control, and eradication programs. The Agency also provides and directs technology development in coordination with other groups in APHIS to support plant protection programs of the Agency and its cooperators at the State, national, and international levels.

The statutory authority supporting this work is contained in 7 U.S.C. 426, 427, 427i, 430, 7701-7772 and 8301 et seq. (Animal Health Protection Act of 2002); and 21 U.S.C. 151-159. The principal legislative authority for these activities is contained in the Act of May 29, 1884; Act of August 30, 1890; Act of February 2, 1903; Act of March 3, 1905; Tariff Act of June 17, 1930; Act of 1931; Act of September 21, 1944; the Plant Protection Act of 2000; Act of February 28, 1947; Act of September 6, 1961; Act of July 2, 1962; the Virus- Serum-Toxin Act of March 14, 1913; and the Public Health Security and Bioterrorism Response Act of 2002, Public Law 107-188 Section 211-231. Authority to collect user fees for veterinary diagnostics is contained in Section 2509 of the Food, Agriculture, Conservation, and Trade Act (Farm Bill) of 1990.

There were 5,550 permanent full-time employees and 1,913 other than permanent full-time employees as of September 30, 2007. Of the total, 1,229 full-time employees were located at headquarters. APHIS manages programs on a national basis through 2 regional offices and 430 field offices, including area offices, work stations, technical centers, and animal import centers. APHIS conducts much of its work in cooperation with State and local agencies, private groups, and foreign governments. APHIS performs work in the 50 States, Guam, Puerto Rico, Virgin Islands, Mexico, Central America, South America, the Caribbean, Western Europe, Australia, Asia, and Africa.

#### OIG Audits Closed

- 50601-08-TE Controls over Issuance of Genetically Engineered Organism Release Permits
- 33601-07-CH Customs and Border Protection Agricultural Inspection Activities
- 50601-09-CH Effectiveness of Controls over Bovine Tuberculosis Eradication Program (Nationwide)
- 33099-11-HY Oversight of Avian Influenza Outbreak

#### OIG Audits in Progress

- 33099-08-KC Controls over APHIS Pilot Certifications
- 50601-16-TE Controls over Genetically Engineered Animal and Insect Research
- 50601-17-TE Controls over Genetically Engineered Food and Agricultural Imports
- 33601-09-CH Controls over Permits to Import Agricultural Products
- 50601-13-AT Department of Agriculture's Progress in Enhancing Agriculture Biosecurity Through Diagnostic and Reporting Networks
- 33701-01-HY Implementation of the National Strategy for Pandemic Influenza
- 50601-12-CH USDA's Controls over the Importation and Movement of Live Animals

#### GAO Audits Closed

Job code 450541 International Airport Passenger Inspection User Fees

Job code 360902 Status of Security at Plum Island Animal Disease Center

Job code 440561 Survey of Mandatory Training of Federal Law Enforcement Officers

Job code 360813 Yellowstone National Park

GAO Audits in Progress

Job code 360871 Coordinated Framework for Regulation of Genetically Modified Agriculture

Job code 450489 Critical Infrastructure Protection for Pandemic Influenza

Job code 360883 Implementation of the Wild Horse and Burro Program

Job code 360830 Marine Aquaculture Development

Job code 450540 User Fee Design

Job code 360855 Veterinarian Capabilities for Disease Prevention, Food Safety, and Defense

## ANIMAL AND PLANT HEALTH INSPECTION SERVICE

Available Funds and Staff Years  
2007 Actual and Estimated 2008 and 2009

Item	Actual 2007		Enacted 2008		Estimated 2009	
	Amount	Staff Years	Amount	Staff Years	Amount	Staff Years
<b>Funding for Salaries and Expenses:</b>						
Appropriation.....	\$ 846,229,525	4,695	\$ 873,438,000	4,780	\$ 919,137,000	4,922
General Provision 735.....	-	-	150,000	-	-	-
Rescission.....	-	-	(6,116,278)	-	-	-
Transfers from Commodity Credit Corporation.....	55,172,550	163	-	-	-	-
Transfers to Commodity Credit Corporation.....	(3,751,484)	-	-	-	-	-
Unobligated Balances carried forward						
start of year.....	304,914,049	-	304,627,600	-	259,140,477	-
Recovery from prior years.....	43,831,536	-	-	-	-	-
Authority from Offsetting collections.....	193,346,575	-	92,695,509	-	94,549,420	-
Subtotal, Discretionary funding.....	1,439,742,751	4,858	1,264,794,831	4,780	1,272,826,897	4,922
<b>Agricultural Quarantine Inspection User Fees:</b>						
Total Collections.....	472,248,628	997	536,590,361	1,032	560,146,678	1,060
Less: Transfer to DHS.....	(286,398,503)	-	(320,609,589)	-	(333,433,973)	-
AQI User Fees (APHIS).....	185,850,125	997	215,980,772	1,032	226,712,705	1,060
Total, Salaries and Expense Available Funding.....	1,625,592,876	5,855	1,480,775,603	5,812	1,499,539,602	5,982
<b>Obligations against Salaries and Expenses:</b>						
Current Year Appropriation.....	788,409,454	4,695	776,539,180	4,780	836,224,245	4,922
Obligations against prior year appropriation.....	69,488,908	395	87,774,766	287	105,047,865	287
Obligations against Agricultural Quarantine						
Inspection User Fees.....	179,134,278	1,012	196,860,000	1,032	219,878,000	1,060
Citrus Canker/Section 32.....	106,848,216	-	-	-	-	-
Melamine/Section 32.....	255,750	-	-	-	-	-
<b>Obligations against Avian Influenza Supplemental:</b>						
Obligations against Avian Influenza Supplemental....	31,890,549	71	-	-	-	-
<b>Emergency Transfers (CCC):</b>						
Bovine Tuberculosis.....	832,589	7	-	-	-	-
Light Brown Apple Moth.....	12,018,943	17	-	-	-	-
Potato Cyst Nematode.....	847,016	8	-	-	-	-
<b>Emergency Carryover (CCC):</b>						
Asian Longhorned Beetle.....	3,261	2	-	-	-	-
Avian Influenza.....	3,744,993	29	6,169,403	35	-	-
BSE.....	401,501	8	1,764,075	4	-	-
Bovine Tuberculosis.....	4,069,537	32	34,692,465	27	-	-
Citrus Canker.....	2,252,214	19	-	-	-	-
Emerald Ash Borer.....	13,693,093	38	8,620,893	10	-	-
Exotic Newcastle Disease.....	1,232,525	20	-	-	-	-
Glassy Winged Sharpshooter.....	13,303	2	-	-	-	-
Infectious Salmon Anemia.....	337,088	7	974,352	2	-	-
Karnal Bunt.....	82	2	-	-	-	-
Light Brown Apple Moth.....	-	-	3,273,770	6	-	-
Medfly (Guatemala).....	1,617	1	-	-	-	-
Medfly (Tijuana).....	15,363	4	-	-	-	-
Medfly (FL, CA).....	-	-	1,346,550	4	-	-
Mexican Fruit Fly.....	403,612	4	-	-	-	-
Mormon Cricket.....	-	-	1,788,951	5	-	-
National Animal ID System.....	827,171	8	267,536	2	-	-
Plum Pox Virus.....	10,544	3	-	-	-	-
Potato Cyst Nematode.....	10,218,726	47	10,205,657	45	-	-
Pseudorabies.....	90,862	6	-	-	-	-
Rabies.....	929,520	9	270,735	3	-	-
Scrapie.....	53,704	4	-	-	-	-
Spring Viremia of Carp.....	904	2	-	-	-	-
Sudden Oak Death.....	2,872,005	28	-	-	-	-
Unobligated Balance Carried Forward.....	-	-	-	-	30,919,192	80
Subtotal, Emergency Obligations.....	54,870,173	307	69,374,387	143	30,919,192	80
Subtotal, Direct Salaries and Expenses.....	1,230,897,328	6,480	1,130,548,333	6,242	1,192,069,302	6,349

Item	Actual 2007		Enacted 2008		Estimated 2009	
	Amount	Staff Years	Amount	Staff Years	Amount	Staff Years
<u>Obligations under other</u>						
<u>USDA appropriations:</u>						
Agricultural Marketing Service:						
for administrative and technical support.....	5,965,529	-	5,996,941	-	6,146,865	-
Agricultural Research Service:						
for administrative and technical support.....	1,703,475	-	1,684,689	-	1,726,807	-
Farm Service Agency:						
for administrative and technical support.....	144,500	-	142,906	-	146,479	-
Food Safety Inspection Service:						
for administrative and technical support.....	443,776	-	452,913	-	464,236	-
Foreign Agricultural Service:						
for administrative and technical support.....	476,464	-	471,210	-	482,990	-
Forest Service:						
for administrative and technical support.....	855,252	-	845,820	-	866,966	-
Grain Inspection Service:						
for administrative and technical support.....	1,000,000	-	988,972	-	1,013,696	-
Natural Resource Conservation Service						
for administrative and technical support.....	15,605	-	15,433	-	15,819	-
Office of the Chief Information Officer:						
administrative and technical support.....	359,263	-	366,660	-	375,826	-
Office of Ethics:						
administrative and technical support.....	-	-	316,000	-	-	-
Total, Agriculture Appropriations.....	10,963,864	-	11,281,545	-	11,789,214	-
<u>Other Federal Funds:</u>						
DOD: for Information Technology						
and other services and support.....	2,879,144	-	2,929,448	-	3,002,684	-
DOD, U.S. Air Force: for realty.....	2,969,432	-	3,021,314	-	3,096,846	-
DOD, U.S. Coast Guard.....	43,080					
DOD, Air National Guard.....	89,889					
DOD, U.S. Navy.....	1,936,582	-	1,970,418	-	2,019,678	-
DOD, U.S. Marine Corps.....	428,021	-	435,499	-	446,387	-
DOD, U.S. Army Corps of Engineers.....	355,074	-	361,278	-	370,310	-
Department of Energy.....	133,771	-	140,460	-	143,971	-
DHS: for AQI and other services and support.....	70,072	-	71,296	-	73,079	-
USDOI, Geological Survey, National Park Service						
Office of Insular Affairs.....	230,527	-	234,555	-	240,419	-
USDOI, Bureau of Land Management & Reclamation:						
for administrative and technical support.....	231,785	-	243,374	-	249,459	-
USDOI, Fish and Wildlife Services:						
for natural resources and endangered species.....	1,673,243	-	1,702,478	-	1,745,040	-
USDOT, Federal Aviation Administration	734,051	-	746,376	-	765,036	-
Other Federal Funds.....	827,298	323	839,752	323	860,746	323
Total, Other Federal Funds.....	12,601,969	323	12,696,248	323	13,013,654	323
<u>Reimbursements:</u>						
Funds from States and local entities for						
wildlife services support.....	22,938,595	250	23,339,376	250	23,635,780	282
Import-Export User Fees.....	26,273,367	160	26,732,413	160	27,071,908	184
NVSL Testing Fees.....	867,808	-	882,970	-	894,184	-
Phytosanitary Certificate User Fees.....	5,045,162	85	5,132,811	85	5,197,996	92
Reimbursable Overtime.....	5,313,575	-	5,406,413	-	5,475,073	-
Product Certificates.....	339,290	-	344,918	-	349,298	-
Veterinary Accreditation.....	19,518	-	19,859	-	20,111	-
Veterinary Diagnostics User Fees.....	3,274,701	-	3,331,916	-	3,374,231	-
Other User Fees.....	1,716,579	-	1,746,571	-	1,768,752	-
Other Reimbursements, Annual and No Year,						
Federal and Non-Federal.....	59,629	15	60,671	15	61,581	15
Subtotal, Reimbursable Salaries and Expenses.....	89,054,794	833	90,975,711	833	92,651,783	896
Total, Salaries and Expense Obligations.....	1,319,952,122	7,313	1,221,524,044	7,075	1,284,721,085	7,245

Item	Actual 2007		Enacted 2008		Estimated 2009	
	Amount	Staff Years	Amount	Staff Years	Amount	Staff Years
<b>Buildings and Facilities:</b>						
Current Year Appropriation.....	4,946,040	-	-	-	7,431,000	-
Unobligated Balances carried forward,						
start of year.....	7,353,377	-	9,623,236	-	4,438,803	-
Recovery from prior years.....	291,712					
Total, Buildings and Facilities						
Available Appropriations.....	12,591,129	-	9,623,236	-	11,869,803	-
Obligations.....	2,967,893	-	5,184,433	-	4,100,000	-
Unobligated Balances carried forward						
end of year.....	9,623,236	-	4,438,803	-	7,769,803	-
<b>Trust Funds:</b>						
Misc. Contributed Funds.....	17,127,619	150	14,000,000	150	14,000,000	150
Unobligated Balances carried forward,						
start of year.....	12,529,026	-	15,215,888	-	13,500,000	-
Recovery from prior years.....	198,104					
Total, Trust Funds Available.....	29,854,749	150	29,215,888	150	27,500,000	150
Obligations.....	14,638,861	150	15,715,888	150	15,000,000	150
Unobligated Balances carried forward						
end of year.....	15,215,888		13,500,000		12,500,000	
Total Obligations,						
Animal and Plant Health Inspection Service.....	\$ 1,337,558,876	7,463	\$ 1,242,424,365	7,225	\$ 1,303,821,085	7,395

## ANIMAL AND PLANT HEALTH INSPECTION SERVICE

Permanent Positions by Grade and Staff Year Summary  
2007 Actual and Estimated 2008 and 2009

Grade	2007			2008			2009		
	Headquarters	Field	Total	Headquarters	Field	Total	Headquarters	Field	Total
Senior Executive Service.....	22	11	33	22	11	33	22	11	33
GS-15.....	64	51	115	64	51	115	64	51	115
GS-14.....	278	231	509	278	231	509	278	241	519
GS-13.....	250	438	688	256	446	702	263	457	720
GS-12.....	194	835	1,029	196	852	1,048	203	880	1,083
GS-11.....	110	892	1,002	112	909	1,021	119	923	1,042
GS-10.....	3	9	12	3	9	12	3	9	12
GS-09.....	117	458	575	117	473	590	117	492	609
GS-08.....	14	290	304	14	293	307	14	293	307
GS-07.....	80	487	567	80	500	580	80	525	605
GS-06.....	30	296	326	30	296	326	30	296	326
GS-05.....	31	267	298	31	267	298	31	267	298
GS-04.....	11	67	78	11	67	78	11	67	78
GS-03.....	3	5	8	3	5	8	3	5	8
GS-02.....	6	1	7	6	1	7	6	1	7
Other Graded Positions.....	16	169	185	16	169	185	16	169	185
Total Permanent Positions.....	1,229	4,507	5,736	1,239	4,580	5,819	1,260	4,687	5,947
Unfilled Positions EOY.....	26	96	122	28	96	124	28	110	138
Total Perm. Employment EOY.....	1,255	4,603	5,858	1,267	4,676	5,943	1,288	4,797	6,085
Staff Year Estimate.....	1,452	6,011	7,463	1,406	5,819	7,225	1,439	5,956	7,395

ANIMAL AND PLANT HEALTH INSPECTION SERVICE  
SIZE, COMPOSITION AND COST OF MOTOR VEHICLE FLEET

The FY 2009 Budget Estimate proposes the disposal and replacement of 302 passenger motor vehicles.

APHIS' veterinarians, animal health technicians, inspectors, plant protection and quarantine officers, wildlife biologists and other technical personnel rely upon the motor vehicles to assist in their daily job activities, which entails travel between inspection sites, farms, ranches, ports, nurseries and other commercial firms. The use of Government-owned vehicles has shown to be more cost effective than having personnel use privately-owned vehicles.

To maintain the life span of the vehicle, operators are required to keep historical maintenance records and to submit the vehicle's operational data. Periodic maintenance surveys and consolidation of the vehicle fleet ensure the full use of each vehicle in the fleet.

Replacement criteria: Normally, passenger vehicles are not replaced unless they either have mileage of 60,000 or more, or are three years or more in age. There continues to be an effort to purchase alternative fuel vehicles.

Changes to the motor vehicle fleet. There is a planned increase of 4 sedans/station wagons, and 18 4x4 light trucks. There is a planned decrease of 7 vans, 4 sport utility vehicles (SUVs), and 3 medium trucks. There is no planned change in the number of buses, 4x2 light trucks, and heavy duty trucks. The total planned net increase in the APHIS motor vehicle fleet is 8.

Replacement of passenger motor vehicles. The Agency proposes replacing 302 of the 4,132 passenger vehicles currently in the Agency fleet. The vehicles proposed for replacement will be utilized in the field by APHIS' technical personnel. Vehicles designated for disposal meet the General Service Administration's standards by having mileage of 60,000 or more, or by being more than three years of age.

Impediments to managing the motor vehicle fleet. There are no impediments in managing the motor vehicle fleet.

The size, composition, and cost of Agency motor vehicle fleet as of September 30, 2007 are as follows:

Fiscal Year	Light Duty Vehicles					Medium/Heavy Duty Vehicles		Total	Annual
	Sedans & Station Wagons	Vans	SUVs	Light Trucks		Buses	Trucks	Vehicles	Operating Costs
				4x2	4x4				
FY 2006	502	231	320	1,173	1,904	1	1	4,132	\$9,452,538
Change from 2006	14	8	20	12	50	0	11	115	\$472,626
FY 2007	516	239	340	1,185	1,954	1	12	4,247	\$9,925,164
Change from 2007	-6	-11	-22	-31	-124	0	5	-189	\$381,667
FY 2008	510	228	318	1,154	1,830	1	17	4,058	\$10,306,831
Change from 2008	4	-7	-4	0	18	0	-3	8	\$515,340
FY 2009	514	221	314	1154	1848	1	14	4,066	\$10,822,171

The APHIS aircraft fleet consists of 7 operable aircraft for domestic plant pest and disease management programs; 3 for the international plant and animal pest exclusion programs, one of which is inoperable and used for spare parts; and 34 for the Wildlife Services (WS) management programs. Of the 34 WS aircraft: 20 are owned, 2 of which are inoperable; 5 aircraft are borrowed; and 9 aircraft are rented.

APHIS aircraft are used for aerial resource and surveillance surveys, aerial application tests, methods development and testing, and equipment demonstration and testing; to control and/or eradicate destructive plant pests from attacking agricultural crops; and, to alleviate or control wildlife damage to agricultural products. Some also serve the purpose of monitoring contract aircraft.

Aircraft purchases are made primarily to replace aging or inoperable aircraft. Aircraft replacement authority is mentioned in the Appropriations Act; however, the Agency only replaces when necessary to maintain fleet safety and efficient operating conditions. There are currently no plans to change the aircraft fleet.

## ANIMAL AND PLANT HEALTH INSPECTION SERVICE

Proposed Language Changes

The estimates include proposed changes in the language of this item as follows: (new language is underscored; deleted language is enclosed in brackets):

Salaries and Expenses:

For expenses, not otherwise provided for, necessary to prevent, control, and eradicate pests and plant and animal diseases; to carry out inspection, quarantine, and regulatory activities; and to protect the environment, as authorized by law, including up to \$30,000 for representation allowances and for expenses pursuant to the Foreign Service Act of 1980 (22 U.S.C. 4085), [~~\$873,754,000~~] \$919,137,000, of which [~~\$1,000,000~~] \$4,195,000 shall be available for the control of outbreaks of insects, plant diseases, animal diseases and for control of pest animals and birds to the extent necessary to meet emergency conditions; of which [~~\$37,269,000~~] \$14,162,000 shall be used for the cotton pests program for cost share purposes or for debt retirement for active eradication zones; of which [~~\$9,750,000~~] \$24,144,000 shall be available for a National Animal Identification program; of which [~~\$51,725,000~~] shall be used to conduct a surveillance and preparedness program for highly pathogenic avian influenza] \$59,849,000 shall be used to prevent and control  
 1 avian influenza and shall remain available until expended; of which \$1,015,000 of the plum pox program shall  
 2 remain available until September 30, 2010: Provided, That no funds shall be used to formulate or administer a  
 brucellosis eradication program for the current fiscal year that does not require minimum matching by the States of at least 40 percent: Provided further, That this appropriation shall be available for the operation and maintenance of aircraft and the purchase of not to exceed four, of which two shall be for replacement only: Provided further, That, in addition, [in emergencies] for sudden, urgent and unforeseen circumstances which threaten any segment of the agricultural production industry of this country, the Secretary may transfer from other appropriations or funds available to the agencies or corporations of the Department such sums as may be deemed necessary, to be available only in such emergencies for the arrest and eradication of contagious or infectious disease or pests of animals, poultry, or plants, and for expenses in accordance with sections 10411 and 10417 of the Animal Health Protection Act (7 U.S.C. 8310 and 8316) and sections 431 and 442 of the Plant Protection Act (7 U.S.C. 7751 and 7772), and any unexpended balances of funds transferred for such emergency purposes in the preceding fiscal year shall be merged with such transferred amounts: Provided further, That appropriations hereunder shall be available pursuant to law (7 U.S.C. 2250) for the repair and alteration of leased buildings and improvements, but unless otherwise provided the cost of altering any one building during the fiscal year shall not exceed 10 percent of the current replacement value of the building.

In the fiscal year [2008] 2009, the agency is authorized to collect fees to cover the total costs of providing technical assistance, goods, or services requested by States, other political subdivisions, domestic and international organizations, foreign governments, or individuals, provided that such fees are structured such that any entity's liability for such fees is reasonably based on the technical assistance, goods, or services provided to the entity by the agency, and such fees shall be credited to this account, to remain available until expended, without further appropriation, for providing such assistance, goods, or services. (Agriculture, Rural Development, Food and Drug Administration, and Related Agencies Appropriations Act, 2008.)

Explanation of change:

The first change in language is to integrate the Highly Pathogenic Avian Influenza and Low Pathogenic Avian Influenza programs into a single program to address all avian influenza issues. Additionally, this change will make it possible for the Agency to carry unobligated funds into future fiscal years as provided in the General Provisions.

The second change in language is to carry unobligated funds into the next fiscal year, providing flexibility to address seasonal issues and variations in outbreak levels from year to year for the Plum Pox line item.

## ANIMAL AND PLANT HEALTH INSPECTION SERVICE

LEAD-OFF TABULAR STATEMENTSALARIES AND EXPENSESCURRENT LAW

Appropriations Act, 2008....a/.....	873,754,000
Budget Estimate, 2009.....	919,137,000
Increase in appropriation .....	+45,383,000

## Adjustments in 2008:

Appropriations Act, 2008.....	873,754,000
Rescission under P.L. 110-161 b/.....	-6,116,000
Activities transferred to Departmental Administration	
Office of Ethics c/ .....	-316,000

Adjusted Base for 2008.....	867,322,000
Budget Estimate, Current Law, 2009.....	919,137,000
Increase over adjusted 2008.....	+51,815,000

a/ Excludes \$150,000 provided by General Provision 735, for the planning and design phases for the construction of an agriculture pest facility in the state of Hawaii.

b/ The amount rescinded pursuant to Section 752 of Division A of P.L. 110-161.

c/ Beginning with 2008, the Department will transfer and consolidate all Ethics activities under the Office of Ethics in Departmental Administration. On a comparable basis the full annual cost of the activity is \$316,000 for 2009.

SUMMARY OF INCREASES AND DECREASES

(On basis of adjusted appropriation)

<u>Item of Change</u>	<u>2008</u> <u>Enacted</u>	<u>Pay Costs</u>	<u>Program</u> <u>Changes</u>	<u>2009</u> <u>Estimated</u>
Agricultural Quarantine Inspection (Appr.).....	\$26,874,000	\$642,000	-\$457,000 2a	\$27,059,000
Cattle Fever Ticks.....	7,600,000	233,000	2,074,000 2b	9,907,000
Foreign Animal Disease/Foot and Mouth Disease.....	8,634,000	0	-4,634,000 2c	4,000,000
Fruit Fly Exclusion & Detection.....	60,298,000	790,000	6,318,000 2d	67,406,000
Import/Export.....	11,158,000	324,000	2,094,000 2e	13,576,000
Overseas Technical & Trade Operations.....	0	155,000	19,214,000 2f	19,369,000
Screwworm.....	27,559,000	76,000	1,162,000 2g	28,797,000
Trade Issues Resolution & Management.....	12,417,000	0	-12,417,000 2h	0
Tropical Bont Tick.....	421,000	4,000	10,000 d/	435,000
Subtotal, Pest and Disease Exclusion.....	\$154,961,000	\$2,224,000	\$13,364,000	\$170,549,000
Animal Health Monitoring & Surveillance.....	122,507,000	1,876,000	\$19,202,000 3a	143,585,000
Animal & Plant Health Reg. Enforcement.....	12,352,000	231,000	1,111,000 3b	13,694,000
Avian Influenza.....	0	328,000	59,521,000 3c	59,849,000
Biosurveillance.....	1,977,000	0	-1,977,000 3d	0
Emergency Management Systems.....	15,265,000	161,000	2,954,000 3e	18,380,000
Highly Pathogenic Avian Influenza.....	51,047,000	0	-51,047,000 3f	0
National Veterinary Stockpile.....	0	17,000	8,149,000 3g	8,166,000
Pest Detection.....	27,530,000	246,000	3,587,000 3h	31,363,000
Select Agents.....	4,221,000	38,000	1,738,000 3i	5,997,000
Wildlife Disease Monitoring & Surveillance.....	0	0	1,300,000 3j	1,300,000
Subtotal, Plant and Animal Health Monitoring...	\$234,899,000	\$2,897,000	\$44,538,000	\$282,334,000

Item of Change	2008		Program		2009
	Enacted	Pay Costs	Changes		Estimated
Aquaculture.....	6,807,000	13,000	-\$3,033,000	4a	3,787,000
Biological Control.....	9,514,000	223,000	421,000	4b	10,158,000
Brucellosis.....	9,465,000	119,000	-373,000	4c	9,211,000
Chronic Wasting Disease.....	17,682,000	66,000	-7,357,000	4d	10,391,000
Contingency Funds.....	993,000	32,000	3,170,000	4e	4,195,000
Cotton Pests.....	37,008,000	64,000	-22,910,000	4f	14,162,000
Emerging Plant Pests.....	126,964,000	504,000	18,030,000	4g	145,498,000
Golden Nematode.....	801,000	15,000	29,000	d/	845,000
Grasshopper.....	6,597,000	72,000	-2,092,000	4h	4,577,000
Gypsy Moth.....	4,769,000	74,000	151,000	d/	4,994,000
Imported Fire Ant.....	1,885,000	8,000	265,000	4i	2,158,000
John's Disease.....	10,539,000	53,000	-7,273,000	4j	3,319,000
Low Pathogen Avian Influenza.....	15,610,000	0	-15,610,000	4k	0
Noxious Weeds.....	1,776,000	4,000	-630,000	4l	1,150,000
Plum Pox.....	2,184,000	11,000	1,030,000	4m	3,225,000
Private Land Initiative for Invasive Species.....	0	0	500,000	4n	500,000
Pseudorabies.....	2,385,000	61,000	86,000	d/	2,532,000
Scrapie.....	17,978,000	167,000	-658,000	4o	17,487,000
Tuberculosis.....	15,289,000	104,000	1,555,000	4p	16,948,000
Wildlife Services Operations.....	74,919,000	1,125,000	-2,786,000	4q	73,258,000
Witchweed.....	1,504,000	6,000	22,000	d/	1,532,000
Subtotal, Pest and Disease Management.....	\$364,669,000	\$2,721,000	-\$37,463,000		\$329,927,000
Animal Welfare.....	20,498,000	396,000	\$628,000	5a	21,522,000
Horse Protection.....	494,000	3,000	2,000	d/	499,000
Subtotal, Animal Care.....	\$20,992,000	\$399,000	\$630,000		\$22,021,000
Biosecurity.....	1,938,000	0	-\$1,938,000	6a	0
Biotechnology Regulatory Services.....	11,729,000	148,000	4,429,000	6b	16,306,000
Environmental Compliance.....	2,627,000	42,000	205,000	d/	2,874,000
Plant Methods Development Labs.....	9,483,000	229,000	1,106,000	6c	10,818,000
Veterinary Biologics.....	16,541,000	381,000	2,658,000	6d	19,580,000
Veterinary Diagnostics.....	23,093,000	566,000	9,582,000	6e	33,241,000
Wildlife Services Methods Development.....	17,755,000	343,000	1,481,000	6f	19,579,000
Subtotal, Scientific and Technical Services.....	\$83,166,000	\$1,709,000	\$17,523,000		\$102,398,000
APHIS Information Tech. Infrastructure.....	4,474,000	0	\$555,000	7a	5,029,000
Physical/Operational Security.....	4,161,000	0	2,718,000	7b	6,879,000
Subtotal, Management.....	\$8,635,000	\$0	\$3,273,000		\$11,908,000
Total, Available Appropriations .....	\$867,322,000	\$9,950,000 1a	\$41,865,000		\$919,137,000

d/ Minimal increases requested to meet increasing basic operating costs.

## ANIMAL AND PLANT HEALTH INSPECTION SERVICE

## Salaries and Expenses

Project Statement by Program - Current Law  
(On basis of adjusted appropriation)

	<u>2007 Actual</u>		<u>2008 Enacted</u>		<u>Increase or Decrease</u>	<u>2009 Estimated</u>	
	<u>Amount</u>	<u>Staff Years</u>	<u>Amount</u>	<u>Staff Years</u>		<u>Amount</u>	<u>Staff Years</u>
<u>Pest &amp; Disease Exclusion</u>							
Agricultural Quarantine Inspection (Approp).....	\$27,531,000	303	\$26,874,000	303	\$185,000	\$27,059,000	303
Cattle Ticks.....	7,653,000	110	7,600,000	110	2,307,000	9,907,000	114
Foreign Animal Disease/Foot-and-Mouth Disease.....	8,694,525	27	8,634,000	27	-4,634,000	4,000,000	0
Fruit Fly Exclusion and Detection.....	50,105,139	373	60,298,000	373	7,108,000	67,406,000	398
Import/Export.....	11,697,000	147	11,158,000	147	2,418,000	13,576,000	153
Overseas Technical & Trade Operations .....	0	0	0	0	19,369,000	19,369,000	87
Screwworm.....	21,257,246	36	27,559,000	36	1,238,000	28,797,000	36
Trade Issues Resolution and Management.....	12,505,000	52	12,417,000	52	-12,417,000	0	0
Tropical Bont Tick.....	424,000	2	421,000	2	14,000	435,000	2
Total Pest & Disease Exclusion	139,866,910	1,050	154,961,000	1,050	15,588,000	170,549,000	1,093
<u>Plant &amp; Animal Health Monitoring</u>							
Animal Health Monitoring & Surveillance.....	129,730,015	885	122,507,000	885	21,078,000	143,585,000	901
Animal & Plant Health Reg. Enforcement.....	10,396,000	109	12,352,000	125	1,342,000	13,694,000	132
Avian Influenza.....	0	0	0	0	59,849,000	59,849,000	159
Biosurveillance.....	1,991,000	4	1,977,000	4	-1,977,000	0	0
Emergency Management Systems.....	10,653,000	80	15,265,000	84	3,115,000	18,380,000	91
High Pathogen Avian Influenza.....	41,030,154	131	51,047,000	129	-51,047,000	0	0
National Veterinary Stockpile.....	0	0	0	0	8,166,000	8,166,000	10
Pest Detection.....	26,471,000	116	27,530,000	116	3,833,000	31,363,000	126
Select Agents.....	3,501,000	18	4,221,000	18	1,776,000	5,997,000	24
Wildlife Disease Monitoring & Surveillance.....	0	0	0	0	1,300,000	1,300,000	7
Total Plant & Animal Health Monitoring	223,772,169	1,343	234,899,000	1,361	47,435,000	282,334,000	1,450
<u>Pest &amp; Disease Management</u>							
Aquaculture.....	1,255,000	6	6,807,000	6	-3,020,000	3,787,000	6
Biological Control.....	9,581,000	105	9,514,000	105	644,000	10,158,000	105
Boll Weevil.....	36,493,287	10	0	0	0	0	0
Brucellosis.....	8,909,000	56	9,465,000	56	-254,000	9,211,000	56
Chronic Wasting Disease.....	16,645,000	31	17,682,000	31	-7,291,000	10,391,000	31
Contingency Funds.....	2,970,013	15	993,000	15	3,202,000	4,195,000	15
Cotton Pests.....	0	0	37,008,000	37	-22,846,000	14,162,000	37
Emerging Plant Pests.....	85,301,254	238	126,964,000	265	18,534,000	145,498,000	297
Golden Nematode.....	807,000	7	801,000	7	44,000	845,000	7
Grasshopper.....	5,531,000	34	6,597,000	34	-2,020,000	4,577,000	34
Gypsy Moth.....	4,803,000	35	4,769,000	35	225,000	4,994,000	35
Imported Fire Ant.....	1,898,000	4	1,885,000	4	273,000	2,158,000	4
Johne's Disease.....	12,080,000	25	10,539,000	25	-7,220,000	3,319,000	25
Low Pathogen Avian Influenza.....	11,877,937	24	15,610,000	30	-15,610,000	0	0
Noxious Weeds.....	1,441,000	2	1,776,000	2	-626,000	1,150,000	2
Pink Bollworm.....	5,188,000	20	0	0	0	0	0
Plum Pox.....	2,199,000	5	2,184,000	5	1,041,000	3,225,000	5
Private Land Initiative for Invasive Species.....	0	0	0	0	500,000	500,000	2
Pseudorabies.....	4,374,000	29	2,385,000	29	147,000	2,532,000	29
Scrapie.....	18,475,540	79	17,978,000	79	-491,000	17,487,000	79
Tuberculosis.....	14,897,000	49	15,289,000	49	1,659,000	16,948,000	64
Wildlife Services Operations.....	74,127,489	530	74,919,000	530	-1,661,000	73,258,000	472
Witchweed.....	1,515,000	3	1,504,000	3	28,000	1,532,000	3
Total Pest & Disease Management	320,368,521	1,307	364,669,000	1,347	-34,742,000	329,927,000	1,308

	<u>2007 Actual</u>		<u>2008 Enacted</u>		<u>Increase</u>	<u>2009 Estimated</u>	
		Staff		Staff	or		Staff
	<u>Amount</u>	<u>Years</u>	<u>Amount</u>	<u>Years</u>	<u>Decrease</u>	<u>Amount</u>	<u>Years</u>
<u>Animal Care</u>							
Animal Welfare.....	17,473,000	183	20,498,000	200	1,024,000	21,522,000	204
Horse Protection.....	497,000	5	494,000	5	5,000	499,000	5
Total Animal Care	17,970,000	188	20,992,000	205	1,029,000	22,021,000	209
<u>Scientific &amp; Technical Services</u>							
Biosecurity.....	1,952,000	0	1,938,000	0	-1,938,000	0	0
Biotechnology Regulatory Services.....	10,533,000	70	11,729,000	74	4,577,000	16,306,000	95
Environmental Compliance.....	2,645,000	20	2,627,000	20	247,000	2,874,000	21
Plant Methods Development Labs.....	8,550,000	108	9,483,000	108	1,335,000	10,818,000	116
Veterinary Biologics.....	15,658,000	180	16,541,000	184	3,039,000	19,580,000	194
Veterinary Diagnostics.....	22,496,000	267	23,093,000	269	10,148,000	33,241,000	273
Wildlife Services Methods Development.....	15,461,618	162	17,755,000	162	1,824,000	19,579,000	163
Total Scientific & Technical Services	77,295,618	807	83,166,000	817	19,232,000	102,398,000	862
<u>Management Initiatives</u>							
APHIS Info. Technology Infrastructure.....	4,406,489	0	4,474,000	0	555,000	5,029,000	0
Physical/Operational Security.....	4,190,000	0	4,161,000	0	2,718,000	6,879,000	0
Total Management Initiatives	8,596,489	0	8,635,000	0	3,273,000	11,908,000	0
Rescission P.L. 110-161	0	0	6,116,000	0	0	0	0
Unobligated Balances, end of year.....	58,359,818	0	0	0	0	0	0
Total, Appropriated a/.....	846,229,525	4,695	873,438,000	4,780	51,815,000	919,137,000	4,922

a/ FY 2008 General Provision 735 provided an additional \$150,000 to the Agency for the planning and design of construction of an agriculture pest facility in the state of Hawaii. The funding has been included in the Fruit Fly Exclusion and Detection line item.

## ANIMAL AND PLANT HEALTH INSPECTION SERVICE

## Salaries and Expenses

Project Statement by Program - Current Law

(On basis of adjusted available funds)

	<u>2007 Actual</u>		<u>2008 Enacted</u>		Increase or Decrease	<u>2009 Estimated</u>	
	<u>Amount</u>	<u>Staff Years</u>	<u>Amount</u>	<u>Staff Years</u>		<u>Amount</u>	<u>Staff Years</u>
<u>Pest &amp; Disease Exclusion</u>							
Agricultural Quarantine Inspection (Approp).....	\$27,531,000	303	\$26,874,000	303	\$185,000	\$27,059,000	303
Cattle Ticks.....	7,653,000	110	7,600,000	110	2,307,000	9,907,000	114
Foreign Animal Disease/Foot-and-Mouth Disease.....	8,694,525	27	8,634,000	27	-4,634,000	4,000,000	0
Fruit Fly Exclusion and Detection.....	59,724,336	479	70,505,000	485	7,108,000	77,613,000	510
Import/Export.....	11,697,000	147	11,158,000	147	2,418,000	13,576,000	153
Overseas Technical & Trade Operations .....	0	0	0	0	19,369,000	19,369,000	87
Screwworm.....	25,409,085	114	34,050,000	36	1,239,000	35,289,000	36
Trade Issues Resolution and Management.....	12,505,000	52	12,417,000	52	-12,417,000	0	0
Tropical Bont Tick.....	424,000	2	421,000	2	14,000	435,000	2
Total Pest & Disease Exclusion	153,637,946	1,234	171,659,000	1,162	15,589,000	187,248,000	1,205
<u>Plant &amp; Animal Health Monitoring</u>							
Animal Health Monitoring & Surveillance.....	155,426,842	960	139,541,000	945	21,078,000	160,619,000	961
Animal & Plant Health Reg. Enforcement.....	10,396,000	109	12,352,000	125	1,342,000	13,694,000	132
Avian Influenza.....	0	0	0	0	74,458,000	74,458,000	179
Biosurveillance.....	1,991,000	4	1,977,000	4	-1,977,000	0	0
Emergency Management Systems.....	12,889,538	88	19,102,000	92	3,114,000	22,216,000	99
High Pathogen Avian Influenza.....	41,030,154	131	51,047,000	129	-51,047,000	0	0
National Veterinary Stockpile.....	0	0	0	0	8,166,000	8,166,000	10
Pest Detection.....	26,471,000	116	27,530,000	116	3,833,000	31,363,000	126
Select Agents.....	3,501,000	18	4,221,000	18	1,776,000	5,997,000	24
Wildlife Disease Monitoring & Surveillance.....	0	0	0	0	1,300,000	1,300,000	7
Total Monitoring & Surveillance	251,705,534	1,426	255,770,000	1,429	62,043,000	317,813,000	1,538
<u>Pest &amp; Disease Management</u>							
Aquaculture.....	1,255,000	6	6,807,000	6	-3,020,000	3,787,000	6
Biological Control.....	9,581,000	105	9,514,000	105	644,000	10,158,000	105
Boll Weevil.....	37,985,481	11	0	0	0	0	0
Brucellosis.....	8,909,000	56	9,465,000	56	-254,000	9,211,000	56
Chronic Wasting Disease.....	16,645,000	31	17,682,000	31	-7,291,000	10,391,000	31
Contingency Funds.....	4,378,951	35	2,341,000	20	3,202,000	5,543,000	20
Cotton Pests.....	0	0	39,163,000	38	-22,845,000	16,318,000	38
Emerging Plant Pests.....	103,433,988	314	146,098,000	345	18,534,000	164,632,000	377
Golden Nematode.....	807,000	7	801,000	7	44,000	845,000	7
Grasshopper.....	5,531,000	34	6,596,000	34	-2,019,000	4,577,000	34
Gypsy Moth.....	4,803,000	35	4,769,000	35	225,000	4,994,000	35
Imported Fire Ant.....	1,898,000	4	1,885,000	4	273,000	2,158,000	4
John's Disease.....	12,080,000	25	10,539,000	25	-7,220,000	3,319,000	25
Low Pathogen Avian Influenza.....	16,658,779	54	30,219,000	50	-30,219,000	0	0
Noxious Weeds.....	1,441,000	2	1,776,000	2	-626,000	1,150,000	2
Pink Bollworm.....	5,188,000	20	0	0	0	0	0
Plum Pox.....	2,199,000	5	2,184,000	5	1,041,000	3,225,000	5
Private Land Initiative for Invasive Species.....	0	0	0	0	500,000	500,000	2
Pseudorabies.....	4,374,000	29	2,385,000	29	147,000	2,532,000	29
Scrapie.....	18,475,540	79	17,978,000	79	-491,000	17,487,000	79
Tuberculosis.....	14,897,000	49	15,289,000	49	1,659,000	16,948,000	64
Wildlife Services Operations.....	74,476,679	531	75,745,000	531	-1,661,000	74,084,000	473
Witchweed.....	1,515,000	3	1,504,000	3	28,000	1,532,000	3
Total Pest & Disease Management	346,532,419	1,435	402,740,000	1,454	-49,349,000	353,391,000	1,395

	<u>2007 Actual</u>		<u>2008 Enacted</u>		<u>Increase</u>	<u>2009 Estimated</u>	
	<u>Amount</u>	<u>Staff Years</u>	<u>Amount</u>	<u>Staff Years</u>	<u>or Decrease</u>	<u>Amount</u>	<u>Staff Years</u>
<u>Animal Care</u>							
Animal Welfare.....	17,473,000	183	20,498,000	200	1,024,000	21,522,000	204
Horse Protection.....	497,000	5	494,000	5	5,000	499,000	5
Total Animal Care	17,970,000	188	20,992,000	205	1,029,000	22,021,000	209
<u>Scientific &amp; Technical Services</u>							
Biosecurity.....	1,952,000	0	1,938,000	0	-1,938,000	0	0
Biotechnology Regulatory Services.....	10,533,000	70	11,728,000	74	4,578,000	16,306,000	95
Environmental Compliance.....	2,645,000	20	2,626,000	20	248,000	2,874,000	21
Plant Methods Development Labs.....	8,550,000	108	9,483,000	108	1,335,000	10,818,000	116
Veterinary Biologics.....	15,658,000	180	16,541,000	184	3,039,000	19,580,000	194
Veterinary Diagnostics.....	22,496,000	267	23,093,000	269	10,148,000	33,241,000	273
Wildlife Services Methods Development.....	15,746,855	162	18,193,000	162	1,824,000	20,017,000	163
Total Scientific & Technical Services	77,580,855	807	83,602,000	817	19,234,000	102,836,000	862
<u>Management Initiatives</u>							
APHIS Info. Technology Infrastructure.....	5,482,543	0	4,574,000	0	555,000	5,129,000	0
Physical/Operational Security.....	4,190,000	0	4,161,000	0	2,718,000	6,879,000	0
Total Management Initiatives	9,672,543	0	8,735,000	0	3,273,000	12,008,000	0
Rescission P.L. 110-161.....	0	0	6,116,000	0	-6,116,000	0	0
Office of Ethics.....	0	0	316,000	0	-316,000	0	0
Total, Appropriated a/.....	857,099,297	5,090	949,930,000	5,067	45,387,000	995,317,000	5,209
Avian Influenza supplemental.....	31,890,549	71	0	0	0	0	0
CCC Transfers .....	13,698,548	163	0	0	0	0	0
CCC Carryover.....	41,171,625	159	69,375,000	143	-38,456,000	30,919,000	80
Citrus Canker Section 32.....	106,848,216	0	17,555,000	0	-17,555,000	0	0
Melamine Section 32.....	255,750	0	1,394,000	0	0	1,394,000	0
Trust Funds.....	14,638,861	150	27,216,000	150	284,000	27,500,000	150
Total, Available a/.....	\$1,065,602,848	5,633	\$1,065,470,000	5,360	-\$10,340,000	\$1,055,130,000	5,439

a/ FY 2008 General Provision 735 provided an additional \$150,000 to the Agency for the planning and design of construction of an agriculture pest facility in the state of Hawaii. The funding has been included in the Fruit Fly Exclusion and Detection line item.

## ANIMAL AND PLANT HEALTH INSPECTION SERVICE

## Salaries and Expenses

Project Statement - Crosswalk for the Combined Programs and Redirected Funds  
(Comparable basis of adjusted appropriation)

	<u>2007 Actual</u>		<u>2008 Enacted</u>		<u>Increase</u>	<u>2009 Estimated</u>	
		Staff		Staff	or		Staff
	<u>Amount</u>	<u>Years</u>	<u>Amount</u>	<u>Years</u>	<u>Decrease</u>	<u>Amount</u>	<u>Years</u>
<u>Pest &amp; Disease Exclusion</u>							
Agricultural Quarantine Inspection (Approp).....	\$27,531,000	303	\$26,874,000	303	\$185,000	\$27,059,000	303
Cattle Ticks.....	7,653,000	110	7,600,000	110	2,307,000	9,907,000	114
Foreign Animal Disease/Foot-and-Mouth Disease.....	4,000,000	0	4,000,000	0	0	4,000,000	0
Fruit Fly Exclusion and Detection.....	50,105,139	373	60,298,000	373	7,108,000	67,406,000	398
Import/Export.....	13,188,000	153	12,639,000	153	937,000	13,576,000	153
Overseas Technical & Trade Operations .....	15,708,525	73	15,570,000	73	3,799,000	19,369,000	87
Screwworm.....	21,257,246	36	27,559,000	36	1,238,000	28,797,000	36
Tropical Bont Tick.....	424,000	2	421,000	2	14,000	435,000	2
Total Pest & Disease Exclusion	139,866,910	1,050	154,961,000	1,050	15,588,000	170,549,000	1,093
<u>Plant &amp; Animal Health Monitoring</u>							
Animal Health Monitoring & Surveillance.....	129,730,015	885	122,507,000	885	21,078,000	143,585,000	901
Animal & Plant Health Reg. Enforcement.....	10,396,000	109	12,352,000	125	1,342,000	13,694,000	132
Avian Influenza.....	52,908,091	155	66,657,000	159	-6,808,000	59,849,000	159
Emergency Management Systems.....	14,596,000	84	15,458,000	80	2,922,000	18,380,000	91
National Veterinary Stockpile.....	0	0	3,722,000	8	4,444,000	8,166,000	10
Pest Detection.....	26,471,000	116	27,530,000	116	3,833,000	31,363,000	126
Select Agents.....	3,501,000	18	4,221,000	18	1,776,000	5,997,000	24
Wildlife Disease Monitoring & Surveillance.....	0	0	0	0	1,300,000	1,300,000	7
Total Monitoring & Surveillance	237,602,107	1,367	252,447,000	1,391	29,887,000	282,334,000	1,450
<u>Pest &amp; Disease Management</u>							
Aquaculture.....	1,255,000	6	6,807,000	6	-3,020,000	3,787,000	6
Biological Control.....	9,581,000	105	9,514,000	105	644,000	10,158,000	105
Brucellosis.....	8,909,000	56	9,465,000	56	-254,000	9,211,000	56
Chronic Wasting Disease.....	16,645,000	31	17,682,000	31	-7,291,000	10,391,000	31
Contingency Funds.....	2,970,013	15	993,000	15	3,202,000	4,195,000	15
Cotton Pests.....	41,681,287	30	37,008,000	37	-22,846,000	14,162,000	37
Emerging Plant Pests.....	85,301,254	238	126,964,000	265	18,534,000	145,498,000	297
Golden Nematode.....	807,000	7	801,000	7	44,000	845,000	7
Grasshopper.....	5,531,000	34	6,597,000	34	-2,020,000	4,577,000	34
Gypsy Moth.....	4,803,000	35	4,769,000	35	225,000	4,994,000	35
Imported Fire Ant.....	1,898,000	4	1,885,000	4	273,000	2,158,000	4
Johne's Disease.....	12,080,000	25	10,539,000	25	-7,220,000	3,319,000	25
Noxious Weeds.....	1,441,000	2	1,776,000	2	-626,000	1,150,000	2
Plum Pox.....	2,199,000	5	2,184,000	5	1,041,000	3,225,000	5
Private Land Initiative for Invasive Species.....	0	0	0	0	500,000	500,000	2
Pseudorabies.....	4,374,000	29	2,385,000	29	147,000	2,532,000	29
Scrapie.....	18,475,540	79	17,978,000	79	-491,000	17,487,000	79
Tuberculosis.....	14,897,000	49	15,289,000	49	1,659,000	16,948,000	64
Wildlife Services Operations.....	74,127,489	530	74,919,000	530	-1,661,000	73,258,000	472
Witchweed.....	1,515,000	3	1,504,000	3	28,000	1,532,000	3
Total Pest & Disease Management	308,490,583	1,283	349,059,000	1,317	-19,132,000	329,927,000	1,308
<u>Animal Care</u>							
Animal Welfare.....	17,473,000	183	20,498,000	200	1,024,000	21,522,000	204
Horse Protection.....	497,000	5	494,000	5	5,000	499,000	5
Total Animal Care	17,970,000	188	20,992,000	205	1,029,000	22,021,000	209

	<u>2007 Actual</u>		<u>2008 Enacted</u>		Increase	<u>2009 Estimated</u>	
		Staff		Staff	or		Staff
	<u>Amount</u>	<u>Years</u>	<u>Amount</u>	<u>Years</u>	<u>Decrease</u>	<u>Amount</u>	<u>Years</u>
<u>Scientific &amp; Technical Services</u>							
Biotechnology Regulatory Services.....	10,533,000	70	11,729,000	74	4,577,000	16,306,000	95
Environmental Compliance.....	2,645,000	20	2,627,000	20	247,000	2,874,000	21
Plant Methods Development Labs.....	8,550,000	108	9,483,000	108	1,335,000	10,818,000	116
Veterinary Biologics.....	15,658,000	180	16,541,000	184	3,039,000	19,580,000	194
Veterinary Diagnostics.....	22,496,000	267	23,093,000	269	10,148,000	33,241,000	273
Wildlife Services Methods Development.....	15,461,618	162	17,755,000	162	1,824,000	19,579,000	163
Total Scientific & Technical Services	<u>75,343,618</u>	<u>807</u>	<u>81,228,000</u>	<u>817</u>	<u>21,170,000</u>	<u>102,398,000</u>	<u>862</u>
<u>Management Initiatives</u>							
APHIS Info. Technology Infrastructure.....	4,406,489	0	4,474,000	0	555,000	5,029,000	0
Physical/Operational Security.....	4,190,000	0	4,161,000	0	2,718,000	6,879,000	0
Total Management Initiatives	<u>8,596,489</u>	<u>0</u>	<u>8,635,000</u>	<u>0</u>	<u>3,273,000</u>	<u>11,908,000</u>	<u>0</u>
Rescission P.L. 110-161.....	0	0	6,116,000	0	-6,116,000	0	0
Total, Appropriated a/.....	<u>\$787,869,707</u>	<u>4,695</u>	<u>\$873,438,000</u>	<u>4,780</u>	<u>\$45,699,000</u>	<u>\$919,137,000</u>	<u>4,922</u>

a/ FY 2008 General Provision 735 provided an additional \$150,000 to the Agency for the planning and design of construction of an agriculture pest facility in the state of Hawaii. The funding has been included in the Fruit Fly Exclusion and Detection line item.

## Justification of Increases and Decreases

(1) An increase of \$9,950,000 for employee compensation, which includes annualization of the FY 2008 pay raise and the anticipated FY 2009 pay raise

- (a) This increase will enable APHIS to maintain current staffing levels, which are critical to achieving the Agency's objective of protecting American agriculture. Because a large portion of APHIS' budget is in support of personnel compensation, absorbing pay costs would require a reduction in direct program operations and severely limit the Agency's ability to conduct offshore threat assessment and risk reduction activities; regulate and monitor to reduce the risk of introduction of invasive species; ensure the safe research, release, and movement of agricultural biotechnology events; manage issues related to the health of U.S. animal and plant resources and conflicts with wildlife; and develop emergency preparedness and response capabilities to quickly detect, contain and eradicate animal and plant pest and disease outbreaks.

(2) A net increase of \$13,364,000 and 43 staff years for Pest and Disease Exclusion Activities:

Program Assessment Rating Tool: The Pest and Disease Exclusion Programs were evaluated during the FY 2006 budget cycle and received a rating of "effective" and a score of 86 percent. The Office of Management and Budget (OMB) rated these programs effective because they targeted infestations at their source, reducing the likelihood of the problem reaching the United States. OMB recommended that APHIS establish a new measure to show how the program impacts potential losses from pests and diseases. APHIS is currently working to implement a new, Agency-wide measure that will identify the value of damages prevented or mitigated by its programs. OMB also recommended that APHIS integrate its strategic plans for domestic and international fruit fly activities to better protect the United States from outbreaks of exotic fruit flies as well as implement recommendations designed to streamline the permitting process for imported animals and animal products. APHIS completed the integration of its strategic plans for its domestic and international fruit fly programs in June 2006. The Agency is continuing to address the recommendations on streamlining the permitting process for imported animals and animal products. Since the initial recommendation was made, APHIS has adopted a new Agency-wide permitting system, ePermits, that allows importers to apply for permits on-line and provides tracking and data management enhancements for APHIS program managers. APHIS has signed a contract with an outside organization to examine whether the changes made through ePermits are effective. A final report is expected in winter 2008.

(a) A decrease of \$457,000 and 0 staff years for the Agriculture Quarantine Inspection program (\$26,874,000 and 303 staff years available in FY 2008).

The Agriculture Quarantine Inspection (AQI) program protects the United States from the risks associated with the introduction of invasive agricultural pests and diseases. APHIS and the Department of Homeland Security cooperate to carry out this program, and fund the programs through a combination of appropriations and user fees. APHIS receives appropriated funding to conduct pre-departure agricultural inspections of passengers and cargo traveling from Hawaii, Puerto Rico, and other islands to the mainland United States. To assist Hawaii, we also conduct inspections of passengers traveling from outlying Hawaiian Islands to Honolulu en route to the mainland. In FY 2009, we expect to conduct a portion of these activities through a reimbursable agreement funded by the State of Hawaii. As a result, this part of the program will decrease by \$457,000, with no change in program level.

- (b) An increase of \$2,074,000 and 4 staff years for the Cattle Fever Tick program (\$7,599,000 and 110 staff years available in FY 2008).

The Cattle Fever Tick program strives to prevent the re-introduction and establishment of cattle fever ticks and bovine babesiosis in the continental United States by maintaining a permanent quarantine zone between Texas and Mexico, also known as the buffer zone. However, the number of tick-infested premises in the permanent quarantine and tick-free areas outside the buffer zone has increased dramatically in recent years.

There has been a significant increase in the number of infested premises identified outside of the quarantine zone. As of September 2007, there were 25 infested premises outside the quarantine zone as compared to nine in 2006, a 177 percent increase. Further, the situation in the quarantine zone has deteriorated. As of September 2007, 42 infested premises were found in the quarantined area as compared to 37 by September 2006. These outbreaks can likely be attributed to the following factors: commingling of livestock with free-ranging wildlife animals that perpetuate tick populations; unrestrained movement of wildlife animals, spreading ticks in and out of the quarantine zone; increasing number of deer and exotic ungulates maintained on "hunting ranges" in the area that serve as alternate hosts of cattle ticks in the absence of cattle; reduction in surveillance for Mexican stray and smuggled livestock along the Rio Grande River as a result of having to deploy existing APHIS resources into eliminating infestations outside of the quarantine zone; increased abundance of white-tailed deer and other cervids along the Mexican bordering states, which move freely across national borders, or shallow rivers, and crisscross the Rio Grande River; and, environmental changes in weather patterns, climate, and vegetation creating suitable microhabitats for the ticks.

APHIS is requesting \$2.074 million and 4 staff years to initiate the implementation of the 5-year strategic plan to assist in moving the quarantine zone south of the U. S. border. Implementation of the strategic plan will allow APHIS to accomplish five program goals, with objectives and action items to accomplish each goal, necessary to achieve complete eradication of the cattle fever tick. The goals and action items include: preventing the entry of cattle fever ticks into the United States by clearing and maintaining trails along the river, which ensures that the ticks cannot spread to the cattle from the brush; identifying areas of high activity of tick incursions and developing agreements with wildlife agencies for controlling whitetail deer and exotic ungulates that cross the river from Mexico; maintaining an effective surveillance program to rapidly detect any cattle fever tick incursions by working with the Texas Animal Health Commission (TAHC) to develop comprehensive standards; preventing the establishment of cattle fever tick infestations by developing, enforcing, and updating standards to quickly eradicate infestations; identifying and procuring the tools and knowledge necessary to maintain the United States as free of cattle fever ticks, together with USDA's Agricultural Research Service, TAHC, and other cooperators; and, collaborating with Mexico to eliminate cattle fever ticks in areas of Mexico that impact the United States.

The budget increase will support 4 new tick inspectors and allow APHIS to update needed equipment, repair facilities, and acquire needed supplies and materials. The inspectors will assist with: conducting systematic treatment of livestock in infested and exposed premises in the quarantined area and free area; conducting treatment of deer and exotics in infested premises; conducting inspections every 14 days of quarantined premises; inspecting and treating livestock moved within or from the quarantined area, or from quarantined premises in the free area; conducting horseback patrols of the international boundary; apprehending, inspecting, treating, and hauling to quarantine facilities animals of Mexican origin and native stray livestock when required; cleaning and disinfecting equipment and premises; operating biodegradation systems; managing dipping vats and testing vat samples; and tracing animals moved from infested herds,

and inspection and treatment of trace-out cattle. The increased inspections will allow more timely and efficient inspections and treatments.

The additional funding will allow the program to conduct the number of river patrols or systematic treatments that are necessary for the program to effectively operate. We will be able to replace old equipment (in some cases 30+ year-old equipment); upgrade to newer, better technologies for communicating or recording spatially referenced data; begin the installation of any high, game-proof fencing along 200 miles of quarantine line; and support methods development work for treating tick-infested wildlife. As a result, we anticipate more infestations would be identified in the quarantine and free areas.

APHIS will measure overall program performance by the percentage of cattle fever tick outbreaks outside the quarantine zone that are eliminated in less than 12 months. Outside of the permanent quarantine zone, the risk of cattle fever ticks spreading into areas currently free of ticks will be minimized or eliminated. The Agency's target for 2008 is to continue to eradicate 100 percent of cattle tick infestations once identified.

If the increase is not provided, APHIS anticipates that the cattle fever tick situation will continue to deteriorate. From October 2006 to October 2007, infected premises outside the quarantine area jumped from nine to 27. Without the requested resources APHIS will not be able to stop the increasing rate of tick re-infestations. As the ticks continue to move outside the quarantine zone, the chances that bovine babesiosis will be introduced into the U.S. cattle population is greatly increased. This reintroduction into the U.S. could have severe consequences, including high mortality and loss of production in the cattle population, resulting in adverse economic effects on the estimated \$30 billion beef and cattle industry in the southeast U.S. In Texas alone, which represents 12 percent of the national herd value, the total economic impact could be up to \$706 million if ticks and babesiosis become reestablished. Also, trade would be impacted, resulting in new interstate movement restrictions and international quarantine requirements.

- (c) A permanent redirection of \$4,634,000 and 27 staff years from the Foreign Animal Disease/Foot-and-Mouth Disease program to the Overseas Technical and Trade Operations program (\$8,634,000 and 27 staff years available in FY 2008).

APHIS is proposing to shift approximately \$4.634 million and 27 staff years from the Foreign Animal Disease/ Foot-and-Mouth Disease program to the Overseas Technical and Trade Operations (OTTO) line item, which also combines components of Trade Issues Resolution and Management. Since the same resources are conducting these program operations, formally merging resources will simplify administration of the programs and eliminate any misperception that we have two separate staffs working on separate programs. By bringing the line items together, APHIS will improve effective and efficient management of the international programs. The Agency will maintain \$4 million in the Foreign Animal Disease program to continue cooperative agreements in the Americas specifically to safeguard animal health in the United States. Examples of these agreements include our collaboration with the governments of Panama and Mexico to operate Bio-safety Level-3 animal health diagnostic laboratories and with Colombia to support foreign animal disease eradication activities.

- (d) An increase of \$6,318,000 and 25 staff years for the Fruit Fly Exclusion and Detection program (\$60,298,000 and 373 staff years available in FY 2008).

Several exotic fruit fly species pose great risk to American agriculture. Introduction of these pests into the United States causes economic losses from destruction and spoiling of host commodities, costs associated with implementing control measures, and loss of market share due to restrictions on shipment of host commodities. The market value of host commodities totaled about \$7.2

billion in the United States in 2002, with approximately \$5.1 billion of that grown in California and \$1.8 billion in Florida.

Among the exotic fruit flies that threaten domestic agriculture, the Mediterranean fruit fly, (*Ceratitidis capitata* -- commonly called Medfly, or "Moscamed" in Spanish) is widely recognized as our most economically significant threat. APHIS estimated that establishment of the Medfly in the continental United States would cost nearly \$2 billion per year in export market losses alone.

APHIS and its cooperators have developed an integrated exotic fruit fly protection system, and a major component of the system is to maintain a barrier to the northward spread of the Central American Medfly population into the United States via Mexico.

APHIS and its agriculture counterparts in Mexico and Guatemala have successfully maintained this barrier for the past 25 years by jointly conducting survey, regulatory, and control activities along the Mexico-Guatemala border. The most expensive part of the control activities is the production and release of about 2 billion sterile Medflies each week. The current size of the Medfly-free section of the barrier zone is 98,000 square kilometers.

Although the cooperative program has been successful with its barrier goal, it is becoming much more expensive and complex to maintain. In FY 2007, the cooperative program experienced the largest number ever of Medfly outbreaks in the southern Mexico State of Chiapas, which forms a large section (68,000 square kilometers) of the Medfly-free section of the barrier zone.

According to several expert panel reviews, it is becoming more expensive and difficult to maintain the barrier because of economic, social, and environmental changes within the program's barrier operations zones. Because of environmental concerns, the program had to switch to an organic pesticide that is much more expensive than the one previously used. Because many of the local indigenous groups (Mayan Indian tribes) living in the project area do not allow entry by Mexican and Guatemalan government and Moscamed program personnel, it has been necessary to rely more on release of sterile Medflies as a preventive strategy. This control technique is much more expensive as well. In the past ten years, a large portion of the Lacondona jungle area in Mexico and tropical forests in the Petén region of Guatemala have been opened up to agriculture and to new towns connected by better roads. This development has eliminated a natural Medfly-free barrier to northward expansion of the pest, and the program has been forced to spend many of its resources for control activities in this area.

To strengthen the Medfly barrier zone, APHIS requests \$6.318 million and 25 staff years. The additional staff years will work in the field to monitor fly populations or in the sterile fly facility to increase production. APHIS will use the additional funds and staff to add at least 12,000 square kilometers (about 4,600 square miles) to the size of the barrier's Medfly-free zone. To accomplish this, APHIS will use the funds to: expand sterile fly production and provide resources for additional aerial operations and organic bait spray; provide operating expenses at the program's Petapa fruit fly methods center in Guatemala to develop and mass produce new genetically-modified Medfly strains that could greatly enhance the efficiency and efficacy of the sterile Medfly control technique, and offset rising energy costs, the falling dollar, and wage increases to keep up with inflation in Guatemala, where inflation runs at over 5 percent per year and the U.S. dollar has experienced a 6 percent devaluation in past year.

Without the additional \$6.318 million, APHIS will not have the resources to strengthen and expand the barrier zone at the Mexico-Guatemala border. The Agency would anticipate more and more outbreaks above the current barrier zone each year, requiring emergency responses to prevent the spread of the pest into the United States. APHIS estimates the cost of domestic eradication to be substantially higher than barrier maintenance costs projected for Mexico and

Guatemala. If Medfly were to become established in the United States, it would cause an estimated \$2.1 billion in damages in lost export markets and control costs annually.

- (e) A net increase of \$2,094,000 and 6 staff years for the Import/Export program consisting of: 1) a permanent redirection of \$1,481,000 and 6 staff years from Trade Issues Resolution and Management; and 2) an increase of \$613,000 and 0 staff years (\$11,158,000 and 147 staff years available in FY 2008).

APHIS is proposing to redirect \$1.481 million and 6 staff years from the Trade Issues Resolution and Management program to the Import/Export line item. This funding supports the Veterinary Medical Officers (VMO's) who work on international Import/Export issues. Formally merging resources will simplify administration of the programs and eliminate any misperception that APHIS has two separate staffs working on separate programs with similar functions. The Import/Export program serves to facilitate safe international trade; monitor the health of animals presented at the border; and regulate the import and export of animals, animal products, and biologicals. By bringing the line item activities together, APHIS will increase the effectiveness and efficiency of the Import/Export program.

APHIS requests \$613,000 for general operations at the National Center for Import/Export. The increase is required due to the growing complexity of foreign trade. With this increase in funding the number of foreign animal disease outbreaks associated with imports allowed by the recognition of animal health status within foreign regions will remain at zero. Also, the target number of export markets opened, expanded, or retained by domestic regionalization will be two. Domestic regionalization allows uninfected parts of the country to remain open and continue the exportation of goods despite an outbreak of disease in another region of the United States.

- (f) A net increase of \$19,214,000 and 87 staff years for the Overseas Technical and Trade Operations program consisting of: 1) a permanent redirection of \$10,936,000 and 46 staff years from Trade Issues Resolution and Management; 2) a permanent redirection of \$4,634,000 and 27 staff years from Foreign Animal Disease/Foot and Mouth Disease program; and 3) an increase of \$3,644,000 and 25 staff years (\$0 and 0 staff years available in FY 2008).

APHIS provides internationally-based animal and plant health expertise that enhances USDA's capacity to safeguard American agricultural health and facilitate trade. The Agency works outside of the United States under the authority of the Foreign Service Act (1980) and Executive Order 12363 (1982) and directly employs American Foreign Service Officers and host country nationals in 44 locations in 39 countries. APHIS proposes to redirect and merge portions of the Foreign Animal Disease/ Foot-and-Mouth Disease program (\$4,634,000 and 27 staff years) and Trade Issues Resolution and Management program (\$10,936,000 and 46 staff years) into a single line item called Overseas Technical and Trade Operations (OTTO). Because the same resources support operations for these programs, formally merging them will simplify administration of the programs and eliminate any misperception that we have two separate staffs working on separate programs.

APHIS' OTTO program is vital to safeguarding domestic agriculture against trans-boundary animal and invasive plant diseases and facilitating safe agricultural trade. OTTO accomplishes its mission by:

- Coordinating with foreign governments and international organizations to enhance global regulatory infrastructure and implementing offshore safeguarding initiatives;
- Gathering information on emerging or changing pests and disease threats and conditions overseas and submitting such information to a central data base at APHIS headquarters for analysis, planning, and possible safeguarding actions;

- Developing and implementing sanitary and phytosanitary (SPS) negotiation strategies and negotiating the removal of unjustified SPS trade barriers;
- Intervening to release U.S. shipments, which foreign governments are detaining or holding in foreign ports due to some technical irregularity or concern; and
- Promoting the development and use of international standards and science-based regulatory decisions and policies.

In addition to the redirection of line items, APHIS is requesting an increase of \$3.644 million and 14 staff years to enhance these activities, which will improve the Agency's overall capability of safeguarding U.S. animal and plant health and facilitating safe agricultural trade. The Agency experts will work with foreign governments to develop regulatory infrastructure to monitor, detect, report, and manage pest and disease risks and provide technical expertise to support U.S. trade interests by resolving SPS trade barrier issues and facilitating shipments into the country. The new specialists will coordinate and implement international regulatory development projects that strengthen overseas pest and disease detection and control and promote safe trade with developing countries. They will also work with international organizations, such as International Plant Protection Convention and the World Organization for Animal Health, to promote U.S. regulatory policies and influence the development of international standards. This team of agriculture and trade experts will work around the world to protect U.S. agriculture from animal and plant disease and pests.

APHIS tracks the number of foreign animal disease outbreaks in the United States to measure its success with safeguarding agricultural health. In FY 2007, APHIS reported no foreign animal disease outbreaks in the United States. With the increase, the Agency will have the capability to maintain this success as risks grow. The Agency also tracks the amount of trade facilitated. Up to the third quarter in FY 2007, the Agency retained, expanded, and opened markets valued at \$1.64 billion and facilitated the shipment of \$4.5 million of U.S. agricultural commodities to overseas markets. The increased funding will allow APHIS to strengthen the SPS trade system, reduce SPS trade disruptions, and improve opportunities for U.S. exporters.

Without this increase, the Agency will not have the necessary data or means to quickly report offshore animal and plant health events. This will heighten the risk of animal and plant disease and pest introductions in the United States. Furthermore, the Agency is also striving to establish a presence in areas with important export markets to address SPS and market issues where APHIS either has no or limited presence. By expanding our overseas presence, the Agency will be able to build international support for trade agreements, facilitate safe agricultural trade, and make markets available to United States agricultural exports. Without the increase, APHIS will be unable to keep up with the workload brought on by new Free Trade Agreements, which require significant resources to prepare for negotiations and SPS resolutions.

- (g) An increase of \$1,162,000 and 0 staff years for the Screwworm program (\$27,559,000 and 36 staff years available in FY 2008).

Screwworms are parasites that can cause great damage to domestic livestock and other warm-blooded animals. The larvae of this pest enter open wounds of the host animal and feed on the raw flesh. APHIS estimates that livestock mortality caused by the screwworm cost \$121.7 million to livestock producers in the southwest in 1973. In 2006 dollars, this would be about \$545 million. The study also estimated consumer losses due to the reduction in meat supply at over \$656 million in 2006 dollars. The total loss would amount to \$1.201 billion.

The screwworm program, consisting of cooperative efforts with Mexico and other countries of Central America, and Panama, has eradicated the pest south of the United States to the narrowest

point in Panama and established a permanent barrier against the pest at the Panama-Colombia border. This barrier protects U.S. livestock producers against this costly pest.

The Agency is establishing a new sterile fly rearing facility in Panama, closer to the region where screwworm has not been eradicated. Eventually, this facility will replace the facility in Mexico and will reduce the risk of re-infestation to the United States through accidental release of fertile flies. The program will use \$1.162 million to purchase essential equipment needed to run the new screwworm plant (x-ray machines, trailers, safety equipment, conveyors, vehicles, lab equipment, etc.). These additional purchases will allow the Agency to avoid a delay in the plant becoming fully operational. With the increase, the Agency will begin operating the new facility at full capacity in FY 2009. In FY 2007, the Agency reported 7 cases of screwworm in Panama. With this increase, APHIS will achieve its goal of zero screwworm cases in Central America and enhance this effective and efficient barrier against the screwworm.

- (h) A permanent redirection of \$12,417,000 and 52 staff years from the Trade Issues Resolution and Management program consisting of: 1) \$1,481,000 and 6 staff years to the Import/Export program; and 2) \$10,936,000 and 46 staff years to Overseas Technical and Trade Operations program (\$12,417,000 and 52 staff years available in FY 2008).

APHIS is proposing to redirect \$10.936 million and 46 staff years from the Trade Issues Resolution and Management (TIRM) program to establish the Overseas Technical and Trade Operations (OTTO) line item and \$1.481 million and 6 staff years from the TIRM program to the Import/Export line item. Currently, TIRM supports activities conducted by two separate staffs, one dedicated to international agricultural trade and one dedicated to U.S. animal and animal products trade. We are proposing to dissolve the TIRM line item and redirect the funds to these other programs. We will merge the \$10.936 million and 46 staff years from TIRM with other components of the Foreign Animal Disease/Foot and Mouth Disease program to form the OTTO line item. This will simplify administration of the programs and eliminate any misperception that we have separate staffs working on separate programs. We will merge \$1.48 million and 6 staff years from TIRM with the Import/Export program, which works primarily on monitoring the health of animals presented at the border and regulating the import and export of animals, animal products, and biologics.

- (3) A net increase of \$44,538,000 and 89 staff years for Plant and Animal Health Monitoring Activities:

Program Assessment Rating Tool: The Plant and Animal Health Monitoring programs were evaluated during the FY 2005 budget cycle and received a rating of "effective" and a score of 87 percent. These programs were rated effective because they were well managed and coordinated activities with State, local and tribal partners. OMB recommended that APHIS develop a strategic plan to manage the Cooperative Agricultural Pest Survey (CAPS) process for gathering plant pest survey data. In response, APHIS is developing a new strategic direction and is seeking consensus among State, Federal and university partners in the Cooperative Agricultural Pest Survey process. A mission statement and guidance documents have been developed, and a meeting to communicate the program's new guidance occurred in August 2007. The program plans to continue to refine the process by reviewing States' proposed survey priorities for alignment with the CAPS mission and strategic direction, and developing additional guidance documents. OMB also recommended that APHIS continue to implement a comprehensive swine disease surveillance system to improve the efficiency of its animal health surveillance efforts. In response, APHIS is advancing the design and implementation of components for classical swine fever, swine brucellosis, and pseudorabies. The next major milestone is to implement the major elements of the pseudorabies surveillance plan, with a target of completing the work by the end of calendar year 2008. Additionally, OMB recommended that APHIS add a long-term measure to show the

impact of the program on economic losses from pests and diseases. APHIS is currently working to implement a new, Agency-wide measure that will identify the value of damages prevented or mitigated by its programs. For the programs in this group, the measure focuses on the value of the damages prevented by animal and plant health monitoring and surveillance activities. APHIS plans to have baseline data for the measure for the FY 2010 budget process.

- (a) An increase of \$19,202,000 and 16 staff years for the Animal Health Monitoring and Surveillance program (\$122,507,000 and 885 staff years available in FY 2008).

APHIS' Animal Health Monitoring and Surveillance (AHMS) program is instrumental in safeguarding the health of U.S. livestock. The program has several components that work as a system to find animal diseases quickly, trace their origin, and prevent their spread. Detecting a disease before many animals have been exposed to it limits the spread and allows more time for eradication and control efforts. The Agency estimates that a half week delay in intervention can increase cleaning, disinfection, depopulation, and quarantine costs by \$70 million, and increase total costs by \$135 million, including production and trade losses related to a major disease event. Therefore, the monitoring and surveillance activities within the AHMS program are crucial to minimizing and preventing damages to the U.S. livestock industry.

APHIS proposes that \$11.723 million of the increase be used for the National Animal Identification System (NAIS). APHIS will also redirect \$2.634 million from Congressionally designated programs for a net increase in NAIS funding of \$14.357 million. The proposed funding level more accurately reflects how much the program needs to carry out essential activities and how much its cooperators will require to achieve the objectives of the NAIS business plan. The redirection will also provide needed funding for other critical activities within the program.

APHIS will use \$3.051 million of the increase to support cooperative efforts with the States, including \$1.283 million to expand the National Animal Health Laboratory Network (NAHLN). In order to meet NAHLN standards, the laboratories are required to meet biosecurity level (BSL) 3 requirements, include biosafety cabinets, controlled double-door laboratory access, and special facility engineering. These laboratories will screen-test surveillance samples at their locations, adding more capacity to the national surveillance program. The laboratories must have several safeguards to ensure that infectious agents are properly contained or destroyed. In addition, laboratory personnel are required to undergo special training and receive preventative vaccines, when required. APHIS will use the remaining \$1.768 million of to support State activities related to animal disease surveillance activities.

An additional \$1.986 million and 12 staff years will be used to enhance the National Surveillance Unit (NSU). The NSU develops and enhances national animal health surveillance through evaluation, design, analysis, prioritization, and integration. Specifically, the Agency will use \$1.493 million for 4 veterinary medical officers, 3 epidemiologists, 1 agricultural economist, 1 statistician, and 3 specialists. The Agency will also use \$493,000 to support the team with equipment, training, and travel. The increase will support NSU in conducting ongoing activities such as coordinating and integrating surveillance activities to maximize the efficiency of national animal health surveillance; planning and designing of surveillance strategies; working with other staffs within the Centers for Epidemiology and Animal Health to enhance surveillance of animal health domestic diseases, foreign animal diseases, and emerging animal diseases; providing a focal point for the collection, analysis and dissemination of surveillance information for the purposes of action planning and risk analysis; and evaluating the overall efficacy of the Agency's national animal health surveillance and specific surveillance tools.

An increase of \$2.442 million and 4 staff years will be used to enhance the National Veterinary Accreditation Program. The Agency will use \$1.265 million to develop web-based certification and training modules for veterinarians and \$759,000 to program the Veterinary Accreditation module of the Veterinary Services Process Streamlining system. This web-based program will provide a method for veterinarians to expand their knowledge of, and vigilance for looking for recognized foreign animal diseases at a significant savings to them in time and money. The Agency will use \$418,000 to hire 1 veterinary medical officer, 1 veterinary practitioner specialist, and 2 program analysts to administer the enhanced program by developing training modules and conducting outreach activities to increase the number of accredited veterinarians.

APHIS will measure overall program performance by the number of significant introductions of foreign animal pests or diseases that spread beyond the original area of introduction and cause severe economic or environmental damage, or damage to the health of animals. The Agency's target for 2009 is zero introductions. By helping develop more efficient animal trace back mechanisms, equipping labs to screen tests for foreign animal diseases, building comprehensive surveillance systems, and increasing a field workforce to conduct surveillance, the Agency will be able to detect disease faster, minimize the spread of disease, and assist in keeping global trade markets open to U.S. animals and animal products.

Without additional funds, the Agency will be less capable of detecting a foreign animal disease in its original area of introduction; therefore, we expect that the likelihood of the disease spreading will be higher. In particular, the Agency will not be able to increase its ability to test for highly pathogenic and communicable diseases such as avian influenza and encephalitis; support a team of experts to integrate solutions for animal health surveillance thereby increasing efficiency and effectiveness; or support accredited veterinarians who are instrumental in increasing our capability to maintain extensive disease surveillance and monitoring.

(b) An increase of \$1,111,000 and 7 staff years for the Animal and Plant Health Regulatory Enforcement program (\$12,351,000 and 125 staff years available in FY 2008).

The Animal and Plant Health Regulatory Enforcement (APHRE) program ensures compliance with animal and plant health related regulations through comprehensive investigations, sound enforcement actions, and strong educational efforts. Professionally trained field investigators stationed throughout the United States conduct investigations, track unresolved violation cases, and coordinate investigative efforts within APHIS and with other Federal and State agencies. A small headquarters staff coordinates enforcement actions on a national basis, reviews and processes cases for formal administrative action or civil or criminal prosecution, develops uniform penalty guidelines, collects civil penalties, and coordinates activity between APHIS and USDA's Office of the General Counsel.

The effectiveness of the regulatory enforcement program is under continuous and increasing strain due to greatly increased demand for program services. The current demand has significantly outpaced available program resources. During FY 2007, APHIS initiated a total of 6,566 cases, a significant increase from the 5,140 cases initiated during FY 2006. Agricultural Quarantine Inspection (AQI) cases, the major portion of which comes from Customs and Border Protection (CBP) at the Department of Homeland Security, continue to increase at an extraordinary rate. During FY 2007, CBP referred 5,035 cases to the program, a 44 percent increase from CBP's 3,499 referrals during FY 2006, and over a four-fold increase from CBP's 1,195 referrals during FY 2005. The workload is tremendous, both for the field investigators responsible for responding to the increased case demand, and the headquarters staff charged with pursuing appropriate enforcement actions.

At the end of FY 2007, the number of cases closed through APHIS administrative procedures increased significantly to 3,636 from 3,014 in FY 2006. This is reflective of the rapid increase in case referrals from CBP. The program has hired several case examiners at headquarters to help alleviate the backlog generated by CBP. One of the measures used by the program to track effectiveness is the average number of days it takes to resolve cases. Currently, the program is focusing on closing cases that have been open the longest and/or those that are approaching the five-year statute of limitations. For FY 2007, the average time needed to resolve cases was 143 days, down significantly from the 200 days required in FY 2006. The proposed increase in investigators will enable the program to maintain this significant improvement while handling the anticipated further increases in referrals, without increasing the average processing time.

The program requests an increase of \$1.111 million to hire and train 7 new field investigators. APHIS plans to place 5 of the personnel in areas of the country with high concentrations of animal welfare facilities. This strategy will allow the program to respond to an anticipated increase in case referrals from APHIS' Animal Care (AC) program. The number of referrals is expected to rise significantly in FY 2009 as that program expands its coverage to include facilities that contain rats, mice, and birds not involved in research. These investigators will also conduct investigations related to work from APHIS' Veterinary Services, Plant Protection and Quarantine, and Biotechnology Regulatory Services, as well as CBP.

The remaining 2 investigators will be stationed in areas close to major ports-of-entry to help meet the rapidly increasing number of cases involving port violations referred to the program by CBP. CBP has been increasing the number of agriculture specialist inspectors at ports-of-entry, resulting in the aforementioned increased agriculture referrals to APHIS. In addition, the CBP performance goals promote the aggressive enforcement of agriculture regulations. The threat of plant pests and animal diseases and the dangers of bioterrorism make it imperative that APHIS field a strong investigative capability so that its primary clients maintain confidence in the Agency's enforcement program, and continue to refer cases.

Without additional resources, APHIS may be unable to respond effectively and timely to violation referrals, which could frustrate and discourage the reporting of alleged violations at ports of entry. The number of referrals from CBP is a key performance measure of that organization's dedication to the agriculture mission. The potential ramifications include a loss of confidence in the enforcement program, which in turn could result in a reluctance of inspectors to identify violations and request enforcement action. Another ramification of the growing backlog of cases would be a loss of the deterrent effect gained from prompt investigations and prosecutions, and consequently a reduction in voluntary compliance. All of these combined could significantly increase the risk of a foreign pest or disease entering the United States, perhaps prompting a serious emergency. It could take only one successful investigation into an illegal importation or interstate movement of a diseased or infested animal or plant to save millions in the potential costs associated with an eradication program and the loss associated with U.S. Agricultural commodities here and beyond U.S. borders.

- (c) A net increase of \$59,521,000 and 159 staff years for the Avian Influenza program consisting of: 1) a permanent redirection of \$15,610,000 and 30 staff years from Low Pathogenic Avian Influenza program; 2) a permanent redirection of \$51,047,000 and 129 staff years from the Highly Pathogenic Avian Influenza program; and 3) a decrease of \$7,136,000 and 0 staff years (\$0 and 0 staff years available in FY 2008).

USDA has both an international and domestic role in controlling the spread of avian influenza and reducing its effects to the economy and public health. Internationally, USDA is working closely with organizations such as the World Organization for Animal Health, the United Nations' Food and Agriculture Organization, and the World Health Organization to assist highly pathogenic

avian influenza H5N1 affected regions with disease prevention, management, and eradication activities. By helping these countries prepare for, manage, or eradicate highly pathogenic avian influenza H5N1 outbreaks, USDA can reduce the risk of disease spreading from overseas to the United States. Domestically, USDA has worked to further strengthen safeguards in place to protect against the introduction of highly pathogenic avian influenza H5N1 in the United States. Increased surveillance between both wild and commercial bird populations serves as an early warning system to rapidly detect and prevent spread of the disease in the United States. In the event of a detection of highly pathogenic avian influenza, State personnel will be the primary responders with additional assistance from their Federal counterparts in APHIS. APHIS and State animal health officials are working cooperatively with the poultry industry to conduct surveillance at breeding flocks, slaughter plants, live-bird markets, livestock auctions, and poultry dealers. The national Low Pathogenic Avian Influenza program goal is to prevent and control H5 and H7 avian influenza (AI) from entering a spreading in commercial and backyard poultry flocks and causing significant economic damage.

APHIS proposes to permanently redirect \$15,610,000 and 30 staff years from the Low Pathogenic Avian Influenza program and \$51,047,000 and 129 staff years from the Highly Pathogenic Avian Influenza program to establish an Avian Influenza program. By proposing that the activities be combined, synergistic program benefits can be achieved. Activities to prevent and control H5 and H7 avian influenza from entering and spreading in commercial and backyard poultry flocks being performed in the Low Pathogenic Avian Influenza program are being augmented by those in the Highly Pathogenic Avian Influenza program. Formally merging resources will simplify the administration of both programs and help them continue to progress toward controlling avian influenza.

Due to the efficient use of resources as well as completion of one-time costs within the previous Highly Pathogenic Avian Influenza line item, APHIS is requesting a decrease of approximately \$7.136 million. APHIS has further enhanced emergency preparedness activities by stockpiling needed materials used in an avian influenza response, developed computer models to determine possible methods for the disease to spread, supported information technology needs, and performed other activities that had one-time costs.

- (d) A permanent redirection of \$1,977,000 and 4 staff years from the Biosurveillance program to the Emergency Management Systems program (\$1,977,000 and 4 staff years available in FY 2008).

The activities performed under the Emergency Management Systems (EMS) line item support the goal of preventing, preparing for, detecting, and responding to animal health events that may have a sudden and negative impact on the Nation's meat, poultry, and livestock exports. Because the activities being performed under the Biosurveillance program are aligned with those in the EMS program, formally merging resources will simplify the administration of both programs, help them continue to progress toward detecting and responding to foreign animal disease and exotic plant pest and disease incursions in the field, as well as responding appropriately to emergency situations as a result of natural disasters. Funds will be redirected from the Biosecurity and Biosurveillance programs to consolidate efforts under the EMS line item.

- (e) An net increase of \$2,954,000 and 7 staff years for the Emergency Management Systems program consisting of: 1) a permanent redirection to establish the National Veterinary Stockpile program of \$3,722,000 and 8 staff years; 2) a permanent redirection from the Biosecurity program of \$1,938,000 and 0 staff years; 3) a permanent redirection from the Biosurveillance program of \$1,977,000 and 4 staff years; and 4) an increase of \$2,761,000 and 11 staff years (\$15,265,000 and 84 staff years available in FY 2008).

The Emergency Management Systems (EMS) program operations are based on building cooperative relationships with Federal Agencies, States, local governments, Tribal Nations, academia, animal industry stakeholders, and international organizations with the goal of detecting and responding to foreign animal disease and exotic plant pest and disease incursions. EMS activities also promote the appropriate response to emergency situations as a result of natural disasters. The program focuses on establishing emergency response guidelines at the national level; training cooperators at the local level; implementing the National Response Plan; and integrating the Incident Command System into emergency management operations. In addition, the EMS program is designed to establish liaison activities with other Federal agencies and Departments, such as the Department of Homeland Security, engaged in emergency management.

APHIS proposes to merge approximately \$1.938 million and 0 staff years from the Biosecurity program, and \$1.977 million and 4 staff years from the Biosurveillance program into the EMS program in FY 2009. Combining the activities will simplify the administration of the programs, improve the progress in detecting and responding to foreign animal disease and exotic plant pest and disease incursions in the field, and strengthen APHIS' capabilities to respond to an all hazard incident as defined by the National Response Plan. Additionally, the Agency requests an increase of \$376,000 and 4 staff years to support the National Biosecurity Information System (NBIS) to enhance the predictive analysis capabilities in support of the APHIS mission.

In addition, APHIS requests \$1 million to support the Offshore Pest Information System (OPIS), a data collection system that enables APHIS to perform predictive analysis. This analysis is a primary aspect of the Agency's threat identification and risk reduction activity. OPIS enables APHIS to perform resource assignments in the most effective manner which will yield the highest risk reduction based upon information analysis. The funds that were initially used to establish the OPIS infrastructure now support analysts to manage it.

APHIS also requests \$1.1 million and 5 staff years for foreign animal disease planning and other animal agriculture health emergency activity coordination. Of the requested amount, \$700,000 and 5 staff years will be used for disease response planning for the 17 most threatening foreign animal diseases; and to address the increased demands for emergency response coordination during animal disease outbreaks. APHIS will also use \$400,000 to cover increased costs related to foot-and-mouth disease (FMD) vaccines. The United States, in partnership with Canada and Mexico, maintain the North American Foot and Mouth Disease Vaccine Bank (NAFMDVB). The NAFMDVB is a resource available to the three member countries to facilitate a rapid response to an FMD outbreak. APHIS is the United States agent for the NAFMDVB. The cost of the vaccines has increased. Without this requested increase APHIS will have to reallocate funds from other program activities to cover the increased mandatory costs.

APHIS also requests \$250,000 and 2 staff years which will be dedicated to the mandated Emergency Support Functions (ESF)-11. APHIS will use these positions to coordinate inter-agency activities during animal health events, as well as, act as liaisons between APHIS and other support agencies in plan development and other pre-planning activities required to fulfill the requirements under the National Response Plan.

Finally, APHIS is proposing to redirect \$3.722 million and 8 staff years from the EMS program to establish a new National Veterinary Stockpile line item. The National Veterinary Stockpile serves as the primary source of material required to respond to, control, and contain foreign animal and other significant animal disease outbreaks. The critical nature of the National Veterinary Stockpile indicates a need to express the activities as a separate program.

- (f) A permanent redirection of \$51,047,000 and 129 staff years from the Highly Pathogenic Avian Influenza program to the Avian Influenza program (\$51,047,000 and 129 staff years available in FY 2008).

APHIS proposes to permanently redirect \$51,047,000 and 129 staff years from the Highly Pathogenic Avian Influenza program to the new Avian Influenza program.

- (g) A net increase of \$8,149,000 and 10 staff years for the National Veterinary Stockpile program consisting of: 1) a permanent redirection of \$3,722,000 and 8 staff years from the Emergency Management Systems program; and 2) an increase of \$4,427,000 and 2 staff years (\$0 and 0 staff years available in FY 2008).

The National Veterinary Stockpile (NVS) supports prevention, control, and eradication efforts related to animal disease. When it commenced operations in FY 2006, the NVS engaged a logistics management consultant to help establish policies and procedures, analyze and acquire logistics capabilities, and leverage the lessons learned by the Strategic National Stockpile at the Centers for Disease Control. The latter helped the NVS avoid growth problems the Strategic National Stockpile encountered and allowed the program to comply with a requirement of Homeland Security Presidential Directive 9 (HSPD-9), the program's founding directive. NVS established procedures that allowed it to deliver initial inventory to incident sites within 24 hours (another HSPD-9 requirement). The NVS has also created stock rotation, extension, and acquisition processes that have minimized costs while achieving program readiness. This approach ensures that the NVS delivers critical veterinary supplies that are safe and ready to use by responders. The NVS multi-agency Strategic Steering Committee further ensures that the program addresses, in a prioritized manner, those animal disease agents that pose a threat to the Nation.

APHIS is proposing to redirect \$3.722 million and 8 staff years from the Emergency Management System line item to establish a new National Veterinary Stockpile line item. The NVS serves as the primary source of materials required to respond to, control, and contain foreign animal and other significant animal disease outbreaks. The critical nature of the NVS indicates a need to express the activities as a separate program.

The two primary goals of the NVS are that by FY 2011 it will acquire countermeasures against 5 of the 17 most significant disease threats, and countermeasures against 10 of the 17 diseases by FY 2016. To achieve these goals, the NVS is focusing on developing sound policies, procedures, and operations. Directing its resources to formulating strategy allows the NVS to set out a clear and effective plan to achieve its goals.

The NVS is the national repository of vaccines, responder protective equipment, and other critical agricultural supplies. The NVS exists to augment State and local resources in the fight against dangerous animal diseases that could potentially devastate American agriculture, seriously affect the economy, and, for zoonotic diseases, threaten the public's health. In 2004, HSPD-9 mandated that the NVS create the capabilities to deploy the necessary supplies and materials to respond to an incident within 24 hours. APHIS requests \$1.8 million to further create sufficient levels of supplies, vaccines, and equipment for responding to damaging disease outbreaks in the order of

the NVS priority as assigned by the multi-agency Strategic Steering Committee. NVS will use a variety of procurement options such as vendor managed contracts or just-in-time delivery contracts to increase the efficiency and maximize the effectiveness of this funding.

APHIS requests \$569,000 and 2 staff years for program operations to allow the NVS to achieve the greatest effectiveness of program development by seeking experts in logistics who will provide the necessary leadership and guidance as the program advances. An additional \$865,000 will be used for material management and control requirements. Lastly, the NVS will require an additional \$1.193 million to acquire strategic storage locations throughout the Nation as well as perform central storage activities. These strategic storage locations will reduce the time for delivery and increase the effectiveness of the first responders to an incident. This request will allow the NVS to acquire, hold, and deliver countermeasures against the most dangerous animal diseases. Several diseases, including food-and-mouth disease and Rift Valley Fever, are potential terrorist weapons. By providing materials quickly, APHIS will be able to minimize disease spread. This ability will produce major economic savings including costs associated with depopulation, decontamination, disposal, indemnity; losses to owners and industry; and higher consumer costs.

- (h) An increase of \$3,587,000 and 10 staff years for the Pest Detection program (\$27,530,000 and 116 staff years available in FY 2008).

The Pest Detection program supports APHIS' goal of safeguarding U.S. agricultural and environmental resources by ensuring that new introductions of harmful plant pests and diseases are detected as soon as possible, before they cause significant damage. This program uses a four-pronged strategy involving threat assessment, ground survey, diagnostic tools, and emergency response capabilities to prevent, prepare, respond, and recover from introductions of plant pests and diseases that threaten U.S. agriculture and the environment. For FY 2009, APHIS is requesting a \$3.587 million increase to enhance its early detection efforts by increasing the number and intensity of nationwide surveys for high-risk plant pests. APHIS will also redirect \$1.362 million from congressionally designated projects to support national survey priorities.

Of the requested increase for FY 2009, \$3.552 million will go to State cooperators for additional CAPS surveys. Through its offshore pest information system initiative, the Pest Detection program has identified 667 pests as offshore threats to U.S. agriculture. Each year, APHIS and States prioritize the highest-risk pests and conduct nationwide surveys for them through the CAPS network. In FY 2009, States will receive average increases of approximately \$68,000, depending on the commodities and resources at risk. To expand the number of pests covered and make the resulting survey data more useful to producers, APHIS has encouraged States to conduct commodity-based surveys that provide information about various pests that affect a particular crop or resource. For example, 33 States conducted the Exotic Wood-Boring and Bark Beetle survey in 2007, which can cover up to ten pests at once, rather than conducting individual surveys for each one, creating a more efficient surveying system. This allows the program to meet its efficiency performance measure of average cost per individual survey. In FY 2008, the program is working with citrus-producing States to conduct citrus commodity surveys, and additional commodity-based surveys for soybeans and small grains will be added in FY 2009.

APHIS will use \$1.392 million, shifted from lower priority activities, and 10 staff years of the increase to enhance its survey infrastructure, including hiring 7 Pest Survey Specialists, 2 Domestic Survey Identifiers, and 1 specialist to support the management of survey agreements with States and universities and other administrative tasks. The program works with States to implement monitoring systems for new pests at high-risk sites such as nurseries and warehouses that receive international cargo. In addition, the program is working to develop a means of

communicating the information gathered through the surveys to producers, similar to the way APHIS provided information on soybean rust detections to the public through the soybean rust website. More than 70 percent of soybean producers used the program's early warning and public information website to track soybean rust outbreaks in FY 2006 and make informed treatment decisions, preventing unnecessary use of fungicides.

APHIS will measure the success of the program by tracking the value of damages prevented through early detection, and the program is currently analyzing data from FY 2007 to develop a baseline. Eradication programs for pests that were not detected until a decade or more after they arrived (such as Asian longhorned beetle) can cost more than \$150 million. Having the resources to find even one additional infestation at an early stage has the potential to save millions of dollars in eradication costs and prevent the economic and environmental damage new and introduced pests and diseases can cause. Without this increase, APHIS will not have the resources to detect new outbreaks, or introductions of regulatory concern, early enough to prevent significant damage.

- (i) An increase of \$1,738,000 and 6 staff years for the Select Agents program, (\$4,221,000 and 18 staff years available in FY 2008).

The Agricultural Bioterrorism Protection Act of 2002 (ABPA) mandates new regulatory constraints regarding the possession, use, or transfer of agents that pose a grave threat to human or animal and plant health. As required by the ABPA, APHIS has collaborated with Centers for Disease Control and Prevention to promulgate joint regulations that prescribe how each Agency will perform its role. Regulation of select agents is APHIS' most direct homeland security responsibility, and additional funding is needed if the Agency is to successfully fulfill its mandatory role.

APHIS is requesting an increase of \$1.738 million and 6 staff years to fully carry out our responsibilities mandated under the ABPA. This is a result of the increase in interest to conduct research in select agents, which produces an increasing numbers of select agents applications, amendments, and transfer requests that must all be submitted to the program for approval. APHIS also must register facilities that desire to handle select agents which bear a threat to animal health. This registration must occur in a timely and effective manner. The timely registration of facilities allows valuable research and diagnostics to proceed in a manner that enables registrants to achieve their objectives without delay.

Some of the select agents include avian influenza, bovine spongiform encephalopathy, brucellosis, classical swine fever, foot-and-mouth disease, heartwater, and exotic newcastle disease. To respond to the high demand for registry while safeguarding the nation's agricultural resources, APHIS plans to expand on the activities that began in FY 2005. These activities include: conducting inspectional and compliance activities, developing and providing the necessary specialized training of inspection personnel, and conducting educational activities to regulated communities.

As recommended in a report prepared by the USDA Office of Inspector General (OIG) in response to the events of September 11, 2001, the Department has mandated enhanced security for all laboratories using select agents and toxins. To maintain compliance with the OIG findings, as well as the select agent requirements, APHIS will use \$260,000 of the requested increase to expand current physical security associated with the program, including the barcode inventory tracking system that provides the ability to code diagnostic samples and reagents so that they can easily be identified, inventoried, and monitored using portable barcode readers. APHIS will use \$726,000 and 2 staff years for review and approval of registrations; and \$752,000 and 4 staff years to address the increased number of inspections that must be performed.

APHIS will measure program performance by the number of events (theft, loss, or release of biological agents from a regulated entity) involving select agents that can be traced to insufficient regulatory oversight. In FY 2009, APHIS aims to protect the United States from events involving select agents by assuring sufficient regulatory oversight.

- (j) An increase of \$1,300,000 and 7 staff years for the Wildlife Disease Monitoring & Surveillance program (\$0 and 0 staff years available in FY 2008).

A key component of a national animal health surveillance system is the ability to identify potential pathways for animal diseases that can be transmitted from wildlife to livestock. One example of how conducting surveillance and control measures for a disease of concern in wildlife benefits the national interest is to examine the Michigan tuberculosis (TB) program, which works to prevent disease transmission between wild deer and cattle and has been very successful in controlling the prevalence rate of the disease. Approximate losses avoided are \$24.9 to \$26.2 million per year in increased cattle production costs, loss of interstate captive cervid sales, and loss of recreational deer hunting license receipts. Every dollar invested in Michigan's TB program returned approximately five dollars in benefits.

With a \$1.3 million increase, APHIS will hire 7 wildlife specialists to build on a wildlife disease surveillance system with international and domestic components that will allow us to identify potential pathways for animal diseases and to respond to introductions within 24 to 48 hours. In addition, the Agency will provide training and transfer of technology for developing countries to build their animal health infrastructures and thus reduce the likelihood of undetected pathways into the United States.

APHIS' goal is to establish methods for surveillance data collection in wildlife populations and to investigate the prevalence of specific diseases that may move from wildlife to livestock or poultry populations including pseudorabies and bovine TB. With the system, the Agency will provide an infrastructure capable of assisting State, Federal, and Tribal agencies with wildlife disease threats. By supplementing these programs with a nationally coordinated animal surveillance system focused on wildlife, the Agency will support existing programs in the collection of samples, facilitate information exchange, ensure that diseases of national biosecurity concern (e.g., plague, tularemia, classical swine fever) are adequately sampled, and provide additional laboratory infrastructure that would be available for assisting other agencies in disease diagnosis in emergency outbreaks. APHIS will also develop partnerships with the Department of Homeland Security, Canadian and Mexican ministries of agriculture, public health and natural resources agencies, and the Pan-American Health Organization to implement border disease surveillance programs in livestock and wildlife. The system will enhance biosecurity activities and facilitate agricultural agreements in the North American Free Trade Agreement by increasing trade in agricultural products and eliminating the use of sanitary measures as artificial trade barriers. Furthermore, an international border disease surveillance system will proactively reduce the impact of terrorist attacks on agriculture, wildlife, and humans.

Without the proposed base infrastructure and enhanced surveillance capabilities, APHIS' ability to detect the introduction and occurrence of diseases in wildlife that pose a risk to livestock is severely constrained. APHIS will not have the capability to avoid possible ramifications such as loss of consumer confidence in the Nation's food supply; loss of export markets for American agricultural products valued at more than \$71 billion in 2006; producer losses; vulnerability in biosecurity for diseases affecting agricultural and natural resources, and human health and safety; and an inability to eradicate livestock diseases that are maintained in wildlife. APHIS' goal is to have zero incidents of foreign animal disease outbreaks (related to disease transmission from wildlife) that cause severe economical and environmental damage and spread beyond their original area of introduction.

(4) A net decrease of \$37,463,000 and 39 staff years for Pest and Disease Management activities:

Program Assessment Rating Tool: APHIS' Emergency Pest and Disease Management programs (including Emerging Plant Pests, Johnes, Low Pathogen Avian Influenza, and Wildlife Services Operations, among others) were evaluated during the FY 2007 budget cycle and received a rating of "moderately effective" and a score of 84 percent. OMB recommended that APHIS add a long-term measure to quantify the value of the damage prevented or mitigated by the programs as well as continue to review and implement new methods and strategies for containing or eradicating emerging plant pests. In response, APHIS is focusing on four pests within the Emerging Plant Pests line items. APHIS held a science panel for the emerald ash borer (EAB) program in October 2007 and is developing a new management plan for the pest that incorporates the Science Panel's recommendations. APHIS is planning a Science Panel review of the glassy-winged sharpshooter program's new nursery treatment protocols in March 2008. The Agency is also completing an annual review of its strategy against the potato cyst nematode and improving the efficiency of the asian long-horned beetle program by implementing new tracking tools. APHIS will implement the new Agency-wide performance measure focusing on the value of the damages mitigated by the Emergency Pest and Disease Management programs for the FY 2012 budget cycle. The Ongoing Pest and Disease Management (including Cotton Pests, Biological Control, Brucellosis, Gypsy Moth and others) were evaluated during the FY 2008 budget cycle and received a rating of "effective" and a score of 87 percent. OMB found that the programs were well-managed and had a clear purpose. OMB recommended that APHIS continue to implement a measure of damage mitigated and prevented, as well as measure program efficiency, based on the value of damage prevented per program dollar spent. APHIS is continuing to report on these performance measures.

(a) A decrease of \$3,033,000 and 0 staff years for the Aquaculture program (\$6,807,000 and 6 staff years available in FY 2008).

Viral hemorrhagic septicemia (VHS) is a World Organization for Animal Health (OIE) notifiable disease that produces signs such as internal hemorrhages that leads to death in fish.

APHIS requests a decrease of \$3.033 million in the Aquaculture program. At the requested funding levels, APHIS will conduct the sampling necessary to determine which States are most likely to be affected by VHS, where testing requirements should be the most stringent, and what future testing needs to be done to protect the aquaculture. A targeted approach of this nature could help minimize the impact of any VHS regulations on the U.S. aquaculture industry.

(b) An increase of \$421,000 and 0 staff years for the Biological Control program (\$9,514,000 and 105 staff years available in FY 2008).

Biological control is a key component of integrated pest management strategies that utilizes living organisms, such as natural enemies and competitors, to effectively mitigate the impacts of exotic, invasive insect pests, weeds, and plant pathogens, while minimizing the impacts that control tactics for these pests may have on the environment and non-target organisms. Biological control agents survive and reproduce in ecosystems and become self-sustaining; little or no additional cost is involved after successful agent introductions. APHIS uses biological control to target species for which other control methods (such as chemical or cultural control) are impractical. The increase of \$421,000 will be used to maintain current operations and counteract increased costs due to inflation and rising energy costs.

- (c) An decrease of \$373,000 and 0 staff years for the Brucellosis program (\$9,465,000 and 56 staff years available in FY 2008).

Brucellosis is an infectious and contagious bacterial disease of animals and humans caused by organisms of the genus *Brucella*. Although brucellosis can infect other animals, the main threat of disease is to our domestic cattle, bison, and swine herds. Humans, infected incidentally by contact with infected animal tissues or ingestion of dairy foods made from unpasteurized milk from infected animals, may develop a severe intermittent fever, general malaise, and muscle pain.

The national herd prevalence rate for bovine brucellosis was 0.0001% in FY 2007. Feral swine infected with brucellosis continue to pose a significant risk to transitional swine herds in several states. Stringent and vigilant Brucellosis program activities allow the country to maintain program integrity and validate the disease-free status for our domestic cattle and swine herds.

APHIS has realized increased efficiencies in the Brucellosis program. These efficiencies have enabled the Agency to experience costs savings. APHIS requests a decrease of \$373,000 for efficiencies achieved in the program.

- (d) A decrease of \$7,357,000 and 0 staff years for the Chronic Wasting Disease program (\$17,682,000 and 31 staff years available in FY 2008).

Chronic Wasting Disease (CWD) is a degenerative neurological illness affecting elk and deer (cervids) in North America. APHIS' response to this disease includes: surveillance and management in both farmed and wild populations; assistance to State agencies for quarantine of affected animals and premises, humane euthanasia, and testing affected and exposed animals; and establishment of a voluntary Herd Certification Program (HCP) in coordination with States, the farmed cervid industry, and the U.S. Animal Health Associations. In addition, APHIS is working with the U.S. Department of the Interior, Tribes, and States to implement an interagency, national plan to help manage CWD in captive and wild cervids.

The success of the voluntary HCP is based upon cooperation and shared responsibility between the Federal government and State and local interests. Since these are local or regional disease spread issues, the Federal government must rely on States and Tribal governments for support. The budget request encourages this shared responsibility through a funding match requirement under which the Federal government will pay for 60 percent of anticipated program needs, which represents a reasonable Federal funding responsibility for this program. Due to the Federal commitment, APHIS proposes reductions in the CWD captive cervid program by \$2.147 million, and the wild cervid program will be reduced by \$5.21 million. Since the program's inception, APHIS is now better able to anticipate how much funding is used annually for indemnity. Total funding also assumes the realignment of \$1.588 million, previously used for indemnities, for program operations. The goals of this proposal include improving Federal/State partnership by establishing consistent equitable and justifiable allocation of responsibility among parties, thereby allowing beneficiaries to be more involved, and permitting State and local governments to better anticipate and plan for future needs. APHIS expects no performance changes at the proposed cooperator participation level.

- (e) An increase of \$3,170,000 and 0 staff years for the Contingency Funds program (\$993,000 and 15 staff years available in FY 2008).

APHIS' appropriation includes a contingency fund available for the control of outbreaks of insects, plant diseases, animal diseases, and for control of pest animals and birds to the extent necessary to meet emergency conditions. The Agency has utilized the funding to control such emergencies before they can spread and cause significant economic damage. In FY 2007, the

Agency was able to control outbreaks of the Asian gypsy moth, European gypsy moth, contagious equine metritis, rabies, and cattle fever ticks, and, initiate regulatory activities for viral hemorrhagic septicemia. APHIS requests an increase of \$3.17 million to restore the line item to its previous funding level. With the full amount of funding, APHIS will be able to promptly address these outbreaks, increasing the likelihood of pest and disease spread.

- (f) A decrease of \$22,910,000 and 0 staff years for the Cotton Pests program (\$37,008,000 and 37 staff years in FY 2008).

For decades, the boll weevil and pink bollworm (PBW) have cost cotton growers tens of millions of dollars per year in control costs and losses to cotton crops, and APHIS has been working with affected States and the cotton industry to address them.

The active phase of the Boll Weevil Eradication Program is reaching a successful conclusion. APHIS anticipates the boll weevil will be 99 percent eradicated in FY 2008 and completely eradicated by the end of FY 2009. After eradication is complete, APHIS will implement low-cost, post-eradication monitoring to guard against reinfestations. By the end of FY 2008, APHIS expects to have eradicated PBW from 48 percent of currently infested cotton acreage. This compares to 35 percent eradicated by the end of FY 2007. APHIS expects full PBW eradication by 2013.

The Cotton Pests program will continue to coordinate efforts with Federal, State, and local agencies in the United States and Mexico. The operational elements of the program will continue to include: 1) mapping to identify cotton field locations, acreage, and genotypes; 2) detection by trapping and visual surveys; and 3) control using cultural practices, mating disruption with pheromones, *Bacillus thuringiensis* (Bt) cotton, sterile moth releases, and minimal insecticide applications. Eradicating the boll weevil and PBW will lower production costs for growers, increase their yields, and improve fiber quality. In FY 2009, APHIS is requesting a lower appropriation to allow cooperators to increase their contributions to the program.

- (g) An increase of \$18,030,000 and 32 staff years for the Emerging Plant Pests program (\$126,964,000 and 265 staff years available in FY 2008).

The Emerging Plant Pests (EPP) program enables APHIS to maintain the infrastructure flexibility to rapidly detect and respond to outbreaks and introductions of economically significant plant pests and diseases that are not covered by an individual budget item. Detecting and responding to these outbreaks and introductions promptly reduces long-term control and eradication costs. For FY 2009, the \$18.03 million net increase consists of \$35.443 million in increases and \$17.413 million in decreases. The increases include \$22.999 million and 9 staff years for light brown apple moth (LBAM); \$4.137 and 6 staff years for emerald ash borer (EAB); \$3.223 million and 7 staff years for miscellaneous plant pests; \$2.566 million and 10 staff years for *Sirex noctilio*; \$1.268 million and 3 staff years for Karnal bunt (KB); and \$1.25 million for *Phytophthora ramorum*, the pathogen that causes sudden oak death (SOD). The decreases include \$12.64 million for the Citrus Health Response Program (CHRP), \$1.983 million for Asian longhorned beetle (ALB), \$1.818 million and 3 staff years for potato cyst nematode (PCN), and \$371,000 for glassy-winged sharpshooter (GWSS). In addition, the decreases include \$369,000 for hydrilla and \$232,000 for olive fruit fly under miscellaneous plant pests. With these changes, the EPP line item would be distributed as follows (dollars in thousands):

	EAB	Citrus Health	GWSS	ALB	LBAM	PCN	PR	KB	Sirex	Misc. Pests	Total
Funding	34,630	22,856	22,765	17,986	23,992	7,715	6,556	2,771	2,566	3,661	145,498
Staff Years	42	125	16	40	12	12	19	10	10	11	297

APHIS is requesting an increase of \$22.999 million and 9 staff years for LBAM, a devastating exotic invasive pest that significantly damages more than 2,000 types of plants and trees. Its major domestic hosts include stone fruit, apples, grapes, citrus, and nursery stock. Native to Australia and New Zealand, it was found in 12 California counties in FY 2007. If the LBAM becomes established nationwide, it would cause annual losses of \$100 million for just four of the pest's hosts. The LBAM eradication program has been effective thus far, having contained the LBAM within the initial detection area and having eradicated it from two of the 12 infested counties. Of the requested increase, APHIS will direct approximately \$16 million toward a contract to purchase nine million grams of the LBAM pheromone. The contractor will apply four treatments of the pheromone over the entire 500,000-acre infested area. APHIS will use the remaining \$6.999 million of the increase to enforce the Federal quarantine and conduct other activities in California. These activities are critical in containing this pest. To measure performance, this program tracks the quarantine area (250 square miles as of February 1, 2008), the number of sites with compliance agreements that are inspected regularly (829 as of February 1, 2008), and the number of affected counties that have been freed of infection and de-regulated (two of 12 as of February 1, 2008). Although the requested increase would enable the program to make progress toward LBAM eradication, it would have no effect on the performance measures until after FY 2009. However, the increase will likely enable the program to contain this pest within the current quarantine area.

Of the total requested program increase, \$4.137 million will enhance EAB eradication, containment, and outreach activities. APHIS cooperates with six affected States (including Illinois, Indiana, Maryland, Michigan, Ohio, and Pennsylvania) to prevent EAB spread through survey, regulatory, outreach, and control efforts. While the program's ability to contain EAB has been limited by the lack of cost-effective control tools (the only method now available is the removal of all ash trees within a half-mile of an infested site), APHIS and cooperating scientists are developing new control methods, including biological control and chemical treatments. In fact, program officials have identified three biological control agents that - when released at the same sites - will effectively reduce EAB populations. The program plans to incorporate these agents into new containment and eradication plans targeting isolated infestations and the edge of the generally infested area. These plans will combine biological control, chemical treatments, and limited tree removal to eliminate heavily infested trees and remove reproducing populations. It will enable the program to eradicate within 3 years isolated infestations that are too large for widespread tree removal. APHIS will use \$1.637 million to transform a current facility to a biological control insect rearing facility through the purchase and installation of growth chambers, walk-in refrigerators, and other rearing supplies and equipment. This facility will enable the EAB program to mass produce biological control agents for release. The program will use \$1 million for regulatory activities and tree removal at isolated infestations. The remaining \$1.5 million will enhance outreach activities, which are vital to detection and regulatory enforcement efforts. The program will hire 6 additional plant health safeguarding specialists to carry out these activities. With this increase, the program will reduce the number of isolated infestations (outside regulated areas) to one by 2014 and begin impacting EAB populations in the generally infested area. Without it, the program projects at least 16 isolated infestations that year.

APHIS is requesting a \$3.223 million increase and 7 staff years for miscellaneous plant pest and disease programs to restore funding to the FY 2007 level. This amount also includes shifting funding from olive fruit fly and hydrilla. At the requested level, the Agency would be able to

restore national coordination to between 20 and 30 programs aimed at the most threatening pests and diseases not specifically identified elsewhere in the Agency budget. From year to year, the pests and diseases addressed with these funds may change based on risk levels in a certain year. In recent years, the Agency has used this portion of the EPP line item to fund programs to control or eradicate pests such as *Sirex*, cactus moth, Japanese beetle, and pine shoot beetle. In addition, APHIS has occasionally used some of these funds to provide rapid response capability in the initial stages of a new emergency until emergency funds can be secured. In many cases, a small investment can prevent more than \$1 million in losses that would occur if the pest or disease became established.

APHIS is requesting \$2.566 million and 10 staff years to support a permanent regulatory and management program for *Sirex noctilio* in New York, and Pennsylvania. *Sirex* is an exotic wood-boring wasp native to Europe, Asia, and Africa that can devastate pine forests and the softwood lumber industry. In Australia and South America, it has caused 80 percent tree mortality in pine plantations planted with North American pine species. Since the first reproducing *Sirex* population in North America was found in New York State in FY 2004, it has been detected in Michigan, Pennsylvania, and Vermont. If it reaches the southeastern United States, damages over the entire eastern United States could reach \$17 billion. While eradicating *Sirex* is not feasible, APHIS is conducting a biological control program that has been extremely effective in Australia at maintaining *Sirex* populations below economically damaging levels. In FY 2007, the program used EPP carryover funds to continue surveys in New York and Pennsylvania to delimit the pest and determine target areas for biological control releases. In addition, surveys were conducted in Connecticut, Massachusetts, Michigan, New Jersey, Ohio, Vermont, and in several high-risk Western States. APHIS also began mass producing a parasitic nematode to reduce *Sirex* populations and the associated damage. This promising long-term management strategy requires continued releases of the nematode, along with surveys and regulatory activities. Eventually, APHIS will transfer the mass production technology to State and local agencies. The FY 2009 request will establish an ongoing *Sirex* program. It will enable the program to continue survey, regulatory, biological control, outreach, and methods development activities in the infested area, and conduct detection surveys in areas at risk for infestation. With this request, the program will be able to produce 500 million biological control agents and treat 100 sites in FY 2009. In addition, the program plans to conduct surveys in one-third of the States at risk. Implementing this program to manage the damage caused by the pest and prevent its spread to new areas will protect major pine forests across the country, especially in the southeastern United States, where *Sirex* damages could approach \$2 billion.

KB presents a significant regulatory burden on the American wheat industry. APHIS works to convince trading partners that KB is not a disease of quarantine significance but rather merely a grade and quality issue. To achieve this objective, the Agency has developed a strategic plan that focuses on communicating the correct information about this disease. Unfortunately, this process is expensive and time-consuming. The requested \$1.268 million increase for the KB program will strengthen APHIS' efforts to contain this wheat disease. APHIS will transfer approximately \$700,000 to State cooperators to enhance national survey activities. Without the national survey, APHIS has no basis to certify U.S. wheat for export that originates from KB-free area, a requirement by 70 or more trading partners. In addition, APHIS will use \$268,000 to hire 3 plant health officers to enhance regional survey and regulatory activities, \$150,000 for office supplies and project materials, and \$150,000 to purchase equipment. This increase will help APHIS remove KB's classification as a pest of quarantine significance.

The requested \$1.25 million increase for *P. ramorum* will fund nursery inspections in California, Oregon, and Washington State through cooperative agreements. It would elevate program funding to the optimal level. Of the increase, the program will transfer approximately \$1 million to California, \$150,000 to Oregon, and \$100,000 to Washington State. *P. ramorum* affects 78

different kinds of native and exotic trees, shrubs, and plants. It has dramatically altered ecosystems and the landscape along the California coast, and no chemical treatments are available to eliminate it from nursery plants. Through this program, APHIS helps protect the nation's landscape, the complex ecosystems that native oaks support, and the economic livelihood of several industries - such as forest products - from huge losses. This increase will enable APHIS to fully determine the extent of *P. ramorum* in nurseries in those States, take timely regulatory action to prevent further spread, and minimize the need for emergency funds. When SOD or *P. ramorum* is found in a nursery, the program must destroy the host material and inspect the facility for 2 years to ensure that it remains "clean." This program measures performance based on the number of positive finds and infected nurseries. With this increase, APHIS projects to be able to reduce the number of positive regulated nurseries within the three States from 27 in FY 2008 to 18 in FY 2009. Continued funding at this level would enable the program to reduce this number to 6 by the end of FY 2011.

The requested \$12.64 million decrease for the CHRP will enable the Agency to fund approximately half of total program costs. State and local entities in Florida will be expected to fund the other half. The program can afford this reduction, given the reduced need arising from the transition from citrus canker eradication to the management of various citrus pests and diseases. This transition began in January 2006. APHIS expects that this program will continue to allow Florida producers to export citrus from the State while preventing detections of citrus pests and diseases in other States that are attributable to citrus shipments from Florida.

The requested \$1.983 million reduction for the ALB program will allow the Agency to fund 60 percent of total program costs in FY 2009. State and local entities in New Jersey and New York will fund the remaining 40 percent of costs. This represents a reasonable allocation of funding responsibility. By the end of FY 2009, APHIS expects that 171 square miles will be infested and 165 square miles regulated. These numbers would be unchanged from the end of FY 2008.

APHIS is requesting a decrease of \$1.818 million and 3 staff years for the PCN program. PCN, a major pest of potato crops in temperate areas, was first detected in the United States in FY 2006 in an area of Idaho that accounts for 25 percent of the State's commercial potato production. If the outbreak is not eliminated, it could cripple the \$2.9 billion U.S. potato industry, leading to production losses and lost export markets. Because the infestation is relatively small—1,000 acres in two Idaho counties—APHIS and the Idaho Department of Agriculture are conducting an aggressive eradication program to eliminate it. This program involves intensive soil survey and fumigation for five years, strict quarantine enforcement to prevent the infestation from spreading, and 3-4 years of additional surveys to confirm eradication. In FY 2007, APHIS and Idaho potato stakeholders tested approximately 35,000 soil samples from the 425 field and facilities in Idaho. The PCN eradication program was also implemented, which encompasses extensive soil survey and fumigation of the seven fields in Idaho. This program measures performance based on the number of soil samples collected and tested for PCN eradication in Idaho. The program projects to reduce PCN populations in the soil by 40 percent each year. Without eradicating PCN, the program may be unable to prevent the infestation from spreading to other States or support producers' ability to export potatoes to overseas markets, such as Japan, Canada, and Mexico. In FY 2006 and 2007, the Department funded 83% and 82% of the program respectively, since this was a new infestation, and rapid response was important. Now that the program is ongoing and established, a larger share of support from cooperators is appropriate. With the requested decrease, cooperators' contributions will increase for FY 2009, from \$2.630 million in FY 2008 to \$4.448 million in FY 2009.

The \$371,000 reduction for the GWSS program will still leave sufficient funding to cover 47 percent of total program costs. State and local entities in California will fund the remaining 53 percent. At the requested funding level and in cooperation with State and local partners, APHIS

expects to limit the average number of adult detections per trap to less than five in each of three counties (Kern, Riverside, and Tulare).

APHIS will shift the responsibility of funding olive fruit fly trapping activities (\$232,000) and hydrilla survey and control activities (\$369,000) to the affected States.

- (h) A decrease of \$2,092,000 and 0 staff years for the Grasshopper program (\$6,597,000 and 34 staff years available in FY 2008).

Grasshopper and Mormon cricket populations fluctuate widely on rangelands in the western United States. In some years grasshoppers and Mormon crickets are not a concern to ranchers and farmers; however, they can develop (sometimes over several years, sometimes more quickly) into widespread and devastating outbreaks. These outbreaks cause severe economic damage by destroying rangeland forage and threatening crops grown in areas adjacent to rangeland. The last major grasshopper outbreak was in the mid-1980s, but a dramatic Mormon cricket outbreak began in 2000 and continued in some areas through 2005.

Section 417 of the Plant Protection Act provides APHIS with the authority to control grasshoppers and Mormon crickets on rangeland to protect that rangeland. Each year the APHIS Rangeland Grasshopper and Mormon Cricket Suppression Program conducts surveys in 17 western States, provides technical assistance on grasshopper management to land owners/managers, prepares environmental documentation, and conducts training. If funds are available and if outbreaks prompt requests for control action, APHIS will conduct treatments to reduce grasshopper and Mormon cricket outbreaks where needed. In FY 2009, APHIS will need a lower appropriation for the program because carryover funding remains available from a FY 2004 Commodity Credit Corporation (CCC) transfer. That year, APHIS transferred \$20 million from the CCC to conduct control activities for Mormon crickets in Idaho, Nevada, and Utah. APHIS provided the funds to the three States in equal amounts through cooperative agreements, and a portion of these funds will remain available to the States in FY 2009.

- (i) An increase of \$265,000 and 0 staff years for the Imported Fire Ant program (\$1,885,000 and 4 staff years available in FY 2008).

The Imported Fire Ant (IFA) program works to prevent artificial spread of IFA infestations, which cause an estimated billion dollars worth of damages to U.S. agriculture and homeowners/communities in infested areas each year. APHIS works with affected States to enforce regulations designed to prevent IFA from spreading artificially and to conduct surveys along the leading edge of the infestation. Hay has become a known pathway for IFA to infest new areas, because the ants like to nest in it. Widespread and severe drought conditions in FY 2007 have created a tremendous demand for hay in many parts of Tennessee, North Carolina, and neighboring States that are not infested with IFA. Hay from many areas inside the IFA Quarantine (such as Texas) is being shipped to the drought-stricken region. APHIS requests an increase of \$265,000 in FY 2009 for the program to increase surveys in uninfested areas to ensure that the program can maintain its performance target of preventing/eliminating isolated IFA infestations. Additional surveys are necessary to verify that IFA has not become established in uninfested areas that receive a high level of hay shipments.

- (j) A decrease of \$7,273,000 and 0 staff years for the Johne's Disease program (\$10,539,000 and 25 staff years available in FY 2008).

The FY 2009 budget reflects the voluntary nature of the Johne's Disease program. Producers have shown their willingness to enroll in the program, and the momentum can continue as APHIS

collaborates more with its partners in the States and the industry. At the end of FY 2007, there were 8,966 herds enrolled in the Voluntary Bovine Johne's Disease Control Program (VBJDCP), nearly reaching the enrollment goal of 9,000 herds. Approximately 20 percent of cattle herds were enrolled in the VBJDCP with a test-negative herd classification for Johne's. This was below the target of 30 percent, but since this program is voluntary, the ratio of test-negative to test-positive producer participation cannot be controlled. In FY 2007, 47 States were in full compliance with the national program standards. This surpassed the program's targeted goal of 45 States in full compliance.

The collaborative efforts and task-sharing among Federal and State animal health workers allow us to propose a reduction in funding for the program. APHIS proposes reductions to the following activities in the program: \$3.428 million for state cooperative agreements; \$584,000 for educational efforts in the certification and control program; \$1 million for state projects, \$300,000 for grants to states and universities to support clinical trials; \$200,000 for an information system; and \$1.761 million for program operations. Under this proposal, States, universities, and producers, who are among the beneficiaries of the program, would be responsible for testing, herd clean-up, risk assessments and disease management. With this reduction in Federal funding, the States, affected industries, and producers will also assume the majority of the responsibility for continuing the national Johne's demonstration herd project that has been implemented in each region of the country. This project focuses on new and current testing protocol and control methods to determine which are the most cost-effective and have the most efficient management practices for the program.

APHIS will measure overall program performance by the percentage of enrolled cattle herds in the VBJDCP with a test negative herd classification for Johne's Disease. In FY 2008, APHIS will continue to target 30 percent as its goal for the number of herds enrolled in the program that test negative for Johne's disease.

- (k) A permanent redirection of \$15,610,000 and 30 staff years for the Low Pathogen Avian Influenza program to the Avian Influenza program (\$15,610,000 and 30 staff years available in FY 2008).

APHIS proposes to permanently redirect \$15,610,000 and 30 staff years from the Low Pathogenic Avian Influenza program to the Avian Influenza program.

- (l) A decrease of \$630,000 and 0 staff years for the Noxious Weeds program (\$1,776,000 and 2 staff years available in FY 2008).

The noxious weeds program conducts surveys and funds control programs with cooperators nationwide to track infestations of pest plants on the Federal Noxious Weeds List and reduce weed infestations that can damage crops, livestock, other agricultural interests, or the environment. For FY 2009, APHIS is encouraging beneficiaries to assume a larger role in projects supported through cooperative agreements. Specifically, APHIS will save \$630,000 by reducing cooperative agreements for projects that were not chosen based on a programmatic basis.

- (m) An increase of \$1,030,000 and 0 staff years for the Plum Pox program (\$2,184,000 and 5 staff years available in FY 2008).

Plum pox is a viral disease of stone fruit species (peaches, plums, etc.) that first appeared in Pennsylvania in October 1999. The plum pox virus (PPV) can be carried in live nursery stock, in infected fruit prepared for distribution, in grafts and budwood of infected plants, and is transmitted from one plant to another by the feeding of several species of aphid. Plum pox virus does not kill infected trees, but it causes yield losses to growers and reduces the marketability of fruit.

The spread of the PPV disease would significantly affect the United States' \$1.8 billion stone fruit industry. In addition, international trading partners refuse fruit from infected regions. There is currently no cure for PPV and the only control method is the removal of infected trees. The grower's cooperation is vital to the control and eventual eradication of this disease. Having funds available to pay claims for tree removal promptly will help APHIS continue to secure grower cooperation with the PPV eradication effort.

APHIS will use \$1.03 million to compensate farmers who comply with the PPV eradication program. The Agency has previously requested emergency funds as needed rather than seek appropriated funds to cover compensation. The requested increase will provide available funds when compensation needs arise. PPV was detected in New York and Michigan in 2006, increasing the demand for tree removal and compensation. APHIS will use \$15,000 to support program operations that will meet the rising demands for eradication. Having funds available will increase the program's efficiency by allowing the program to gain owner cooperation to remove diseased trees and reduce costs associated with containing the spread. This will allow the program to meet its performance targets of ensuring that less than 1 percent of samples tested are positive for the disease. Without a compensation program, growers may attempt to earn some profit by selling diseased products. Such fruit movement would increase the risk of the virus spreading beyond the counties within which APHIS has contained it.

- (n) An increase of \$500,000 and 2 staff years for the Private Land Initiative for Invasive Species program (\$0 and 0 staff years available in FY 2008).

Invasive species cause serious damage to U.S. lands and waterways. A 1999 Cornell University study estimated that foreign species in the United States cause annual damages and losses of \$130 billion. This figure translates to approximately \$160 billion in 2008 dollars. This damage extends to every part of the country, affecting rural, urban, and suburban areas. Private land owners are often the first to suffer the damages associated with the introduction of invasive species, but they have little or no opportunity to prevent the damage. In addition, they lack the resources and authority to implement comprehensive detection and control programs to address the damage.

To address these issues and enhance the detection and control of invasive species on private lands, APHIS is proposing to develop a Private Lands and Waters Invasive Species Plan and establish a cooperative prevention and management program based with other USDA agencies. The Plan will ensure the early detection of and rapid response to invasive species. It will include methods development; the capacity to accelerate methods development activities when new species are detected and no strategies exist to address them; and incentives for States, private land and waterway owners, and organizations to participate. Once the plan is in place, the program will begin measuring the benefits of enhancing the coordination of invasive species management on private lands. With the increase, APHIS will establish a coordinating staff to develop and begin implementing the Plan. Program managers will focus on identifying funding options and strategies for rapidly responding to invasive species issues and optimizing ongoing efforts across agencies. APHIS will coordinate this effort with other USDA agencies such as the Natural Resources Conservation Service and the Forest Service as well as the U.S. Department of Interior to take advantage of existing partnerships and resources to address invasive species on private lands.

- (o) A decrease of \$658,000 and 0 staff years for the Scrapie program (\$17,978,000 and 79 staff years available in FY 2008).

When the scrapie program was established, funding increases were provided in part for indemnity and the depopulation of affected animals. Due to the unpredictable need for indemnity from year to year, the program was able to apply the unused indemnity funds to enhance critical operations.

As a result, APHIS has been able to provide cooperative funding to States to increase genetic resistance of the national flock to scrapie through genotyping rams; increase surveillance efforts including live-animal surveillance testing of at-risk flocks; and the clean-up of affected flocks. In addition, APHIS personnel have been able to increase samples collected for surveillance, address animal health information management issues, and support efforts towards licensing rapid diagnostic test kits for scrapie.

With several years of data from which to draw, APHIS is now better able to gauge how much funding it uses annually for indemnity. The program requests a realignment of \$3.934 million previously identified for indemnities: of that amount, \$3.276 million would be redirected to continue supporting the critical operations listed above; and the remainder (\$658,000) would be reduced from the scrapie budget. Following the realignment and reduction, \$1.5 million will remain for indemnities. The proposed shift in funding will allow APHIS to support critical operations in the field and avoid setting aside a substantial amount solely for indemnities which would unlikely be needed.

APHIS will measure overall program performance by the percent of black-faced sheep sampled at slaughter that test positive for scrapie. Black-faced sheep are more often affected by scrapie than white-faced sheep. By measuring the percentage of black-faced sheep that test positive over time, APHIS is able to determine the increase or decrease of disease prevalence in a cost-effective manner. In FY 2007, the percent black-face sheep found positive at slaughter continued to decrease, down 35 percent compared to FY 2006.

- (p) An increase of \$1,555,000 and 15 staff years for the Tuberculosis program (\$15,289,000 and 49 staff years available in FY 2008).

Bovine tuberculosis (TB) caused more losses among U.S. farm animals in the early part of the last century than all other infectious diseases combined. A program to eradicate the disease from the United States began in 1917. Although the Nation has made great strides in decreasing the overall prevalence of TB and most States are Accredited-Free, a few cases of the disease continue to be detected year after year. The level of surveillance must be increased so that the cases remaining may be detected as quickly as possible. By rapidly detecting new cases, APHIS and its cooperators will be able to reduce the spread of the disease and eliminate it, so that all States may be Accredited-Free. Left unchecked, TB would cause an estimated \$2.5 billion in losses annually.

APHIS' ultimate goal is to eradicate TB from the United States, making it crucial to detect TB in cattle and bison. The requested increase would enable APHIS to test 10,000 sample lesions, and provide more successful tracebacks of at-risk animals through disease epidemiology in FY 2009. This will ensure that we detect new incidences of TB more quickly, and eliminate them before they spread and cause significant economic damage.

By increasing the level of active surveillance, APHIS expects to find more positive cases of TB than in previous years. Although finding more of these positive cases may cause certain States to lose their Accredited-Free status, it is necessary in order to maintain the goal of Accredited-Free status in at least 47 States and territories, the target level of States with Accredited-Free status in FY 2007. As of October 2007, there were 49 States and territories with TB Accredited-Free status, exceeding the goal for FY 2007.

To help increase both TB enhanced surveillance and testing, APHIS plans to use \$1.555 million to support 10 animal health technicians at the major cattle slaughter plants, 1 pathologist, 1 biologist, and 3 support personnel. Of the increase requested, \$127,000 will be used for transporting surveillance samples to laboratories for histopathology, microbiology, and gamma interferon testing.

The planned use of this funding follows guidelines established in the 2006 Progressive Bovine Tuberculosis Eradication Strategic Plan. Each of the above described benefits correlates with APHIS performance measures for the TB Eradication Program. Slaughter surveillance for TB continues to surpass national goals as established in the Progressive Bovine Tuberculosis Eradication Strategic Plan.

- (q) A decrease of \$2,786,000 and 58 staff years, for the Wildlife Services Operations program (\$74,919,000 and 530 staff years available in FY 2008).

APHIS protects U.S. agriculture, natural resources, property, and human safety and health from wildlife damage and wildlife-borne diseases. This links to the Agency's Strategic goal to manage issues related to the health of U.S. animal and plant resources and conflicts with wildlife. Within the change in program funding, the Agency is requesting a reallocation of funds for high priority needs: \$3.339 million and 10 staff years for wildlife monitoring and surveillance for homeland security, as part of the Food and Agriculture Defense Initiative, and \$2 million and 4 staff years for the oral rabies vaccination program. In order to meet these critical needs, APHIS will reallocate \$5.339 million from other program activities within the Wildlife Services Operations program. APHIS is also requesting a decrease of \$2.786 million for the program, for a total of \$8.125 million in reductions and reallocations.

APHIS' mission for safeguarding American agriculture and human health and safety rests upon the ability to curtail the transmission of wildlife animal diseases to domestic livestock and humans. The World Organization for Animal Health encourages all countries to develop wildlife surveillance systems to improve understanding of the epidemiology of infectious animal and zoonotic diseases, such as bovine tuberculosis. A U.S. wildlife surveillance system will provide substantial benefits to the American livestock and poultry industries, whose exports total approximately \$12 billion annually, by protecting that industry from losses due to pests and diseases spread from free-ranging animals.

In conjunction with the increase request under the Wildlife Disease Monitoring and Surveillance program, the Agency will further support the Food and Agricultural Defense Initiative. This expanded infrastructure will monitor and gather data on the disease status of free-ranging animals at the State level and integrate this data with existing agricultural animal health monitoring systems. APHIS will use this information to detect and respond to disease outbreaks in wildlife populations and mitigate the risk of wildlife diseases transmitted to farmed livestock. The system will monitor losses to the livestock industry attributed to diseases found in wildlife, such as bovine tuberculosis, pseudorabies, swine brucellosis, West Nile virus, and chronic wasting disease. Through this system, the Agency will also have the capability to detect diseases affecting wildlife that originate offshore. APHIS will use the additional \$3.339 million to support 8 wildlife disease specialists and 2 support positions to monitor diseases in wildlife populations and purchase equipment, provide training, and conduct lab diagnostics and computer modeling.

Wildlife rabies poses significant risks to livestock, humans and their pets, as well as wildlife. The Centers for Disease Control and Prevention (CDC) estimates the cost of living with rabies in America is high and growing, exceeding \$300 million per year. Although rabies vaccinations have been available for domestic animals for many years, until recently no such preventive measure existed to control rabies in wildlife. Furthermore, CDC reports that wildlife currently account for greater than 90 percent of reported cases of rabies in the United States. Therefore, the Agency's increased efforts to control and eliminate wildlife rabies will lessen the cost of living with rabies.

Currently, APHIS cooperates with 16 States in oral rabies vaccination (ORV) programs. There are 15 States distributing oral vaccines for raccoons, while Texas distributes vaccine baits for gray fox and coyote. The Agency distributes baits by airplanes in rural areas and by hand in urban and suburban areas.

With a \$2 million increase, APHIS will bolster and expand the ORV zones by increasing bait distribution by ten percent. This effort will help eliminate rabies in gray foxes and raccoons. The Agency will also conduct field trials for new oral vaccine and baits and improve real-time tetracycline analysis to measure bait uptake, allowing the program to make optimal adjustments in the ORV zones to achieve long-term success. To conduct these activities, the Agency will use \$325,000 to hire and equip 2 wildlife biologists and 2 wildlife technicians and \$1.675 million to purchase and distribute rabies vaccinations. The Agency will be able to increase bait-vaccine delivery to bolster and expand ORV zones toward elimination and enhance surveillance, including in border areas. By 2010, the Agency estimates that the increase will allow us to prevent all breaks of canine rabies in the barrier along the Texas-Mexico border and reduce breaks to two or fewer of gray fox and raccoon rabies in the current barrier zone.

Without the increase, APHIS' investment in this goal to reduce the impact of wildlife rabies will be at risk. The Agency's response to new outbreaks will be delayed due to the lack of real time data, which will allow outbreaks to spread beyond control, forcing the Agency into emergency response mode and impeding progress toward elimination of wildlife rabies.

APHIS' Wildlife Services Operations program uses a combination of Federal and cooperative funding to prevent and reduce wildlife damage primarily to agricultural and natural resources as well as to human health and safety. With the proposed increase above, the Agency plans to reduce and reallocate a total of \$8.125 million and 72 staff years. Of this amount, the Agency will reduce \$3.14 million in cost-share programs to allow a more equitable balance between the Federal government and benefitting activities, and \$4.985 million in other wildlife damage management programs. The States involved in the cost-share programs will take on a greater responsibility in contributing resources to their respective programs.

(5) A net increase of \$630,000 and 4 staff years for Animal Care activities:

Program Assessment Rating Tool: APHIS reassessed the Animal Welfare programs and received a rating of "moderately effective" with a score of 81 percent during the FY 2009 budget cycle. OMB found that the program has a clear purpose and issues regulations that include cost-benefit analyses but that, while it is instituting several new performance measures, the program currently does not have baseline data for those measures. OMB recommended that the program collect baseline data for the new measures and customize its outreach activities to support the goal of ensuring the humane care of animals protected by the Animal Welfare Act. APHIS has collected baseline data for the measures and is conducting three surveys related to its outreach activities. The Agency will begin customizing the outreach activities after reviewing data provided by the surveys.

(a) An increase of \$628,000 and 4 staff years for the Animal Welfare program (\$20,498,000 and 200 staff years available in FY 2008).

APHIS' Animal Welfare program carries out activities designed to ensure the humane care and treatment of animals. These activities include inspection of certain establishments that handle animals intended for biomedical research, sold as pets at the wholesale level, transported in commerce, or used for exhibition purposes. Program personnel inspect licensed establishments to ensure compliance with the Animal Welfare Act (AWA). The program places primary emphasis

on the inspection of facilities and records management, investigation of complaints, re-inspection of problem facilities, voluntary compliance through education, and training of inspectors. To counter the problem of increasing workload and rising costs, the program requests a total of \$628,000, of which \$314,000 will be used to respond to increased workload demands, and \$314,000 will be used to continue the process of regulating an estimated 10,000 new facilities that contain rats, mice, or birds not involved in research.

Of the requested amount, \$314,000 and 2 staff years will address increased program workload demands. For the past several years, the effectiveness of the program and, consequently, the ability to meet performance goals has become increasingly strained due to a rapid growth in the number of new licensees and registrants. For example, the number of licensed/registered facilities climbed to approximately 12,000 at the end of FY 2007. This increase represents a nearly 50-percent increase from the 8,200 licensed/registered facilities at the end of FY 2003. The number of field inspectors increased approximately 6 percent from 94 at the end of FY 2003 to 100 at present. Since 2006, the program expanded their operations by adding an average of 130 additional facilities each month for which it is responsible. The program projects that it will conduct between 19,000 and 20,000 inspections this year, compared to 8,208 inspections in FY 2003.

APHIS also requests \$314,000 and 2 staff years to continue regulating an estimated 10,000 new facilities that contain rats, mice, or birds not involved in research. This is based on a settlement agreement negotiated by the Department of Justice in response to a lawsuit seeking to extend AWA coverage to rats, mice, and birds, and subsequent amendment included in the 2002 Farm Bill stipulating that research facilities involving rats, mice, or birds are to be exempt from regulation. Because most rats and mice are bred for research, we anticipate that most of the new facilities covered under the AWA requirements will be pet bird breeders and dealers.

APHIS will recruit and equip the necessary personnel, train the new inspectors, conduct pre-licensing inspections, determine the number of newly covered facilities in voluntary compliance with the AWA, and initiate activities designed to assure a high level of voluntary compliance with the new requirements. APHIS estimates that each new inspector will be able to manage an average of 60-75 cases the first year while they receive training, and then increase the number of cases to 100-120 cases the second year until full performance of 175 cases is attained in the third year. This would allow the program to maintain the current target rate of 91 percent of facilities in substantial compliance of the AWA despite the fact that a number of the newest facilities are somewhat unfamiliar with the AWA regulations and can require an initial learning period to become fully compliant.

Without additional funding, the program will be unable to adequately support its mission of ensuring that all regulated facilities comply with the law, would not be able to address the current rate of growth in workload, and could not fully support other program activities such as information sharing, training and work conferences, enhancing information technology (i.e., inspection based reporting database and mandatory web migration for forms), and upgrading field and office technology capabilities. The ultimate result will be the program's inability to meet performance targets of increased percentage of facilities in substantial compliance.

(6) A net increase of \$17,523,000 and 45 staff years for Scientific and Technical Services activities:

Program Assessment Rating Tool: The Scientific and Technical Services programs are evaluated with the Plant and Animal Health Monitoring programs, which received an "effective" rating with a score of 87 percent during the Fiscal Year 2005 budget cycle. OMB recommended that APHIS add a long-term measure to show the impact of the program on economic losses from pests and diseases. APHIS is currently working to implement a new, Agency-wide measure that will

identify the value of damages prevented or mitigated by its programs. For the programs in this group, the measure focuses on the value of the damages prevented by animal and plant health monitoring and surveillance activities. APHIS plans to have baseline data for the measure for the FY 2010 budget process.

- (a) A permanent redirection of \$1,938,000 and 0 staff years from the Biosecurity program to the Emergency Management Systems program (\$1,938,000 and 0 staff years available in FY 2008).

The activities performed under the Emergency Management Systems (EMS) line item support the goal of preventing, preparing for, detecting, and responding to animal health events that may have a sudden and negative impact on the Nation's meat, poultry, and livestock exports. Because the activities being performed under the Biosurveillance program are aligned with those in the EMS program, formally merging resources will simplify the administration of both programs, help them continue to progress toward detecting and responding to foreign animal disease and exotic plant pest and disease incursions in the field, as well as responding appropriately to emergency situations as a result of natural disasters. Funds will be redirected from the Biosecurity and Biosurveillance programs to consolidate efforts under the EMS line item.

- (b) An increase of \$4,429,000 and 21 staff years for the Biotechnology Regulatory Services program (\$11,729,000 and 74 staff years available in FY 2008).

APHIS' Biotechnology Regulatory Services (BRS) program protects America's agriculture and environment by using a dynamic and science-based regulatory framework that allows for the safe development and use of genetically engineered organisms. Over the past two decades APHIS has effectively overseen more than 13,000 field trials conducted at more than 79,000 sites. During this period, APHIS has strengthened its regulatory oversight to keep pace with new and emerging trends in biotechnology. Specifically, APHIS has strengthened permit conditions for the field testing of plant-made pharmaceuticals and industrials; strengthened compliance reporting requirements; increased the number and frequency of compliance inspections; published the draft programmatic environmental impact statement, the first step towards revising the Agency's regulations for genetically engineered (GE) plants; as well as other key initiatives.

For FY 2009, APHIS requests an increase of \$4.429 million and 21 staff years to further strengthen its regulatory biotechnology oversight through enhanced environmental review and assessments, monitoring and surveillance, and capacity building, both domestically and internationally. On the domestic front, APHIS proposes to fully implement the Biotechnology Quality Management System (BQMS), enhance risk assessment and environmental review capabilities, explore emerging technologies, and incorporate the latest science into the regulatory framework. On the international front, APHIS proposes to monitor emerging biotechnology products for importation into the United States, work on regulatory safety assessment harmonization, and enhance regulatory capacity building activities.

Trading partners expect the program to demonstrate the Agency's commitment to ensuring the safe research, release, and movement of agricultural biotechnology events. APHIS proposes to dedicate \$4.029 million and 18 staff years of the requested increase to enhance domestic program activities, including the full implementation of the BQMS. The BQMS is expected to improve the ability of permit holders (companies and researchers) and associated service providers to demonstrate, through recordkeeping and a documented management system, their ability to manage the safe introduction of genetically engineered organisms into the environment. Specifically, APHIS would hire compliance officers and one program manager to develop and deliver quality assurance training, work with permit holders to assure quality management plans

are developed and in place, develop standardized quality assurance and best practices guidance documents, and provide outreach to the regulated community on the new stewardship program.

APHIS intends to oversee the BQMS program in partnership with USDA's Agricultural Marketing Service (AMS), which will manage the audit component of the program and accredit third party auditors. The goal of BQMS is to assist universities, producers, and companies, who introduce GE organisms, to analyze their operations, identify critical control points where problems could occur, and apply mitigation measures to address those vulnerabilities. The BQMS will complement, not replace, APHIS' existing regulatory compliance and inspection process. In support of the compliance program, APHIS would also conduct adequacy, on-site, and unscheduled surveillance audits. BQMS will take a proactive approach to compliance and will provide the opportunity to head off compliance problems before they occur.

APHIS would also continue to explore emerging technologies in its biotechnology compliance program such as the use of geographical information systems (GIS). GIS technology could be used to produce large and small scale maps of regulated States, counties, and sites to improve compliance, risk analysis, and program management functions; to identify sites that may have been affected by weather events such as hurricanes or tornados in order to respond appropriately to these events; and to enhance data analysis capabilities for risk assessments. In addition, APHIS would strengthen its inspection program and enhance compliance outreach to the regulated industry and other cooperators such as state partners. Without the requested increase, APHIS would be unable to leverage emerging technologies to increase program efficiencies in the compliance program, and would lack the necessary resources to support compliance outreach in the community.

On the international front, APHIS proposes to devote \$400,000 and 3 staff years to enhance regulatory capacity building and monitor the emergence of agricultural biotechnology products throughout the world. APHIS is committed to improving the regulatory capacity of developing countries. APHIS would be better positioned to respond to the growing number of biotechnology regulatory capacity building requests received from developing countries. Developing countries often lack transparent, science-based regulations and credible risk analysis procedures for regulating and assessing foods produced through genetic engineering methods. By fostering the safe development of agricultural biotechnology products in developing countries, APHIS will promote increased public confidence in biotechnologically-derived agricultural foods and food products worldwide. By working to improve the regulatory capacity of developing countries around the world, APHIS can reasonably expect trading partners to use sound science in their regulatory decisions regarding our products. APHIS will also expect products imported from these countries to be safe. The requested funds would enable APHIS to increase building capacity assistance to other countries in FY 2009 and 2010.

Assistance to these countries would provide training on the U.S. biotechnology regulatory framework, assist in the development of complementary regulatory frameworks, and provide follow-up (e.g., reviewing World Trade Organization notifications when these countries develop or modify their regulations and participating in joint reviews). As part of this initiative, the BRS program will develop biotechnology training modules to be delivered to APHIS Foreign Service personnel stationed in strategic locations throughout the world and deliver specialized training to Foreign Service Nationals in the APHIS International Services Program.

Additionally, APHIS proposes to conduct proactive risk assessments to determine the risk of importing products into the United States. APHIS expects the development of these risk assessments to promote our leadership in advancing science-based approaches to risk assessments, and to encourage reciprocal actions from key international trading partners. The additional funds will enable APHIS to complete 15 environmental documents (risk assessments, environmental

assessments, and other environmental documents) in FY 2009, an increase of 25 percent from FY 2005.

Enhancement of our approach to global agricultural biotechnology is expected to: lead to increased confidence in our regulatory system by trading partners, stakeholders, and the public; expand markets for U.S. agricultural biotechnology products overseas; and increase program efficiencies. Without this new approach, the market for our goods overseas may be impacted, and developing nations may look to other countries for guidance in developing regulatory frameworks. In doing so, these countries may be driven to more precautionary or restrictive regulatory systems similar to those seen in the European Union. Additionally, without the requested funding, APHIS may be unable to provide the necessary assurances and accountability on the safe development of GE products to trading partners, traditional agricultural producers, and interest groups.

- (c) An increase of \$1,106,000 and 8 staff years for the Plant Methods Development Laboratories program (\$9,483,000 and 108 staff years available in FY 2008).

The Plant Methods Development Laboratories support APHIS' plant health programs by providing and/or validating advanced scientific and technological tools to detect, diagnose, and control plant pests and diseases. These activities support APHIS' abilities to prepare for and respond to emergencies and to conduct ongoing high-priority programs. APHIS is requesting increases for \$1.106 million and 8 staff years to enhance emergency preparedness through a Crop Biosecurity Program.

APHIS is establishing a Crop Biosecurity Program to coordinate its technical and scientific needs for detecting and responding to high-consequence plant pests and diseases, including the urgent need to expand diagnostic capacity for these pests and diseases. As part of this effort, the program certifies State and university laboratories to conduct tests for high-risk diseases like sudden oak death (SOD), citrus greening, soybean rust, plum pox virus, potato cyst nematode, and *Ralstonia solanacearum* Race 3 biovar 2 (Rsr3b2), any of which could generate large volumes of samples and overwhelm our testing capacity. The accreditation process involves several steps, including the development of a set of test samples that produce reliable results when tested correctly, proficiency testing for each applicant laboratory, and a quality assurance program for ongoing monitoring of the laboratory's performance. In addition, the program will conduct training for Federal, State, and university plant health diagnostic laboratory diagnosticians. APHIS has certified 17 laboratories to conduct tests for the pathogen that causes SOD and will have certified at least 5 to conduct tests for citrus greening by the end of FY 2008. The program will work with the Pest Detection program to set priorities for additional diseases for FY 2009 and beyond. Of the new staff years requested, 1 will support risk analysis capabilities, 6 will work on the accreditation and certification process, and 1 will provide administrative support. Without this increase, APHIS may not be able to maintain and expand this laboratory accreditation program and may not be prepared for outbreaks of high-consequence plant pests or pathogens. The consequences include both losses to agricultural producers and the potential for delays in regulatory decision-making and the subsequent spread of these pathogens.

- (d) An increase of \$2,658,000 and 10 staff years for the Veterinary Biologics program (\$16,541,000 and 184 staff years available in FY 2008).

APHIS' Center for Veterinary Biologics (CVB) regulates veterinary biological products (vaccines, bacterins, antisera, diagnostic test kits, and analogous products) available for the diagnosis, prevention, and treatment of animal diseases, to ensure that these products are pure, safe, potent and effective. The CVB accomplishes its mission through the thorough evaluation of pre-licensing dossiers, testing of products submitted for licensure, inspection of facilities and products, investigations of non-compliance, and post-marketing surveillance. This comprehensive

regulatory approach is the most efficient and effective way to ensure only quality, Federally-licensed veterinary biological products are available to the U.S. consumers.

Licensing activity has increased over the past several years, and the total number of doses of product released increased from 76.6 to 83.1 billion between FY 2004 and FY 2007. During FY 2003-2006, CVB shifted their priority to reducing the turn-around time for licensing a product, and were able to achieve a reduction of their FY 2006 target for the average number of days it takes to license a product by 13 days. This management decision was only intended to be a short term fix and was accomplished at the known cost to policy review and the development of written guidance. The regulated industry has stated that predictability of the licensing process in the current climate is even more important than the number of days to license a product. Therefore, in FY 2007, the Center refocused its resources to other critical activities such as policy development, creation or update of guidance documents, and the critical activity of compliance inspection. This refocus supports CVB's efforts for quality management/ISO 9001 certification to meet domestic and international expectations. Without the requested increase CVB will not be able to maintain its target number of days to license a product. The numbers of days has previously increased from 351 days in FY 2006 to 631 in FY 2007. The Agency projects that the number of days will decrease to 515 in FY 2009 with the requested increase, and that the predictability of the process will align with industry expectations.

The number of veterinary biologics submitted to CVB for review continues to increase, as does their technical complexity due to the increased use of technological advancements. Additional program resources are needed to effectively respond to rapidly changing non-traditional technologies such as: plant-based vaccines; cancer immunotherapeutics in which cancer vaccines target prevention of metastases or recurrence of disease; and new technologies in adjuvants and carriers that are included as components of veterinary vaccines. These components have the potential to dramatically improve the efficacy and safety of products.

To address the workload increase, APHIS will use \$291,000 and 2 staff years of the requested increase for the inspection and compliance activities. These resources will enable APHIS to maintain appropriate levels of activities within the division. Continued inspection of licensed facilities is a critical component in ensuring that licensed biologics remain safe, potent, and efficacious. APHIS will use \$1.136 million and 4 staff years for to the Center's laboratory activities. The additional resources are required to address the increase in license applications and the associated validation work that CVB continues to experience. These laboratory activities are required to validate applicant claims related to the product they wish to license. APHIS will use \$981,000 and 2 staff years for the Center's licensing and policy development activities. Adequate funding would allow the program to hire and train additional staff with a focus on improving the predictability of services provided to the biologics industry. At the same time, CVB will maintain the time required for a product to be licensed for market, increase compliance, and further the program's goal of providing timely, high-quality service to veterinary biologics stakeholders.

The CVB is also expanding activities in pharmacovigilance, the post-marketing monitoring of adverse events associated with the use of licensed veterinary biological products. Post-marketing surveillance provides an essential source of information regarding the performance of products under normal conditions of use, and is the only method to detect and characterize rare, unusual, or emerging adverse events occurring after product licensure. Pharmacovigilance is a valuable reference that allows validation of CVB regulatory processes. The CVB is working closely with the Food and Drug Administration (FDA) to share resources, data collection methods, and review processes for adverse events reports. Continued sharing of information will be accomplished through implementation of a standard data system at the CVB. This data system has already been implemented at the FDA to monitor adverse event reports for veterinary pharmaceutical products.

APHIS is requesting an increase of \$250,000 to purchase and implement this same system for veterinary biological products, and 2 staff years for managing pharmacovigilance activities.

- (e) An increase of \$9,582,000 and 4 staff years for the Veterinary Diagnostics program (\$23,093,000 and 269 staff years available in FY 2008).

The National Veterinary Services Laboratories (NVSL) is unique in its functions: serving as the United States' national and international reference laboratory for animal diseases; conducting disease surveillance testing; providing national leadership in coordination and emergency laboratory response; training State and university laboratory personnel; providing proficiency testing; and developing improved diagnostic technologies. A National Animal Health Laboratory Network (NAHLN) was established to address significant emergent biological and chemical threats, including foreign animal diseases and bioterrorist threats, to animal agriculture and to a secure food supply in the United States. Under the NAHLN business model, the NVSL's diagnostic testing operations will be used primarily for confirmatory testing of samples identified by the NAHLN laboratories as inconclusive.

As administrator for the Nation's premier animal health diagnostic laboratory, APHIS' Veterinary Diagnostics program provides critical services to the animal industry and helps protect the Nation's food supply against acts of bioterrorism. The program requests \$2.049 million to increase services for foreign animal diseases (FADs) in direct support of agricultural defense and homeland security. This will enable APHIS to expand its diagnostics capability to include such FADs as African swine fever, Rift Valley Fever, and classical swine fever. These capabilities support the NAHLN, and taken together, these programs will enhance APHIS' ability to detect emergent, foreign, and bioterrorism agents. The increase will also enable APHIS to acquire all goods required for reagent production, storage, and diagnostic services.

APHIS has experienced a significant increase in work load due to the animal disease program activities. The Agency requires in additional \$1.953 million for increased costs for supplies, shipping, transportation, as well as other associated costs required to support the current work load. Without the increase the program will have to adjust the existing activities in order to offset the cost increases.

The program requests an increase of \$1.3 million to expand activities of the NAHLN. The NVSL established the NAHLN to address significant emergent biological and chemical threats, including FADs and bioterrorism, to animal agriculture and our national food supply. Through the NAHLN, APHIS is establishing unprecedented proactive emergency avoidance as well as preparedness capabilities. The requested amount would provide for the collection, analysis, and management of data and information, maintenance and support, reagent production, and for diagnostic testing supplies. Without the requested increase, APHIS will not be able to actively support the laboratories in the 47 States that are currently participating in the NAHLN, thereby decreasing NAHLN capability and capacity to quickly respond to an animal health emergency.

The Agricultural Bioterrorism Protection Act of 2002 requires that entities, such as private, State, and Federal research laboratories, universities, and vaccine companies, and individuals that possess, use or transfer select biological agents identified as a severe threat to animal and plant health register with the appropriate Federal authority, either APHIS or the Center for Disease Control and Prevention (CDC). Entities that deal with biological agents or toxins identified as a severe threat to animal and plant health are required to register with APHIS. As mandated by the Act, APHIS and CDC published regulations to establish standards and procedures governing the possession, use, and transfer of the select agents. The Veterinary Diagnostics program stores and uses select agents in its operation. APHIS is requesting an increase of \$525,000 and 2 staff years

to address security requirements and meet the standards related to the select agents used in this program.

APHIS requests an additional \$300,000 and 2 staff years for NVSL's laboratory accreditation. In order to be internationally recognized as a leader in animal health, NVSL must achieve International Standards Organization 17025 accreditation for selected areas/testing methods. Additionally, NVSL has an obligation to assume a leadership role in setting standards as well as supporting and implementing appropriate quality assurance improvement programs in order to effectively lead and coordinate the NAHLN and related surveillance and emergency response efforts. Accreditation may be mandated for future international movement of animals and animal products. NVSL must have internationally recognized third party accreditation to remain credible to our trading partners.

APHIS requests an additional \$1.777 million for capital equipment needs related to the relocation to the new National Centers for Animal Health (NCAH) facilities, developed as part of the Ames Modernization project. This request includes APHIS' portion of shared capital equipment needs for combined support services with the Agriculture Research Services' National Animal Disease Center. The equipment will allow APHIS to implement improvements while continuing to effectively carry out program responsibilities.

Of the requested increase, \$822,000 addresses APHIS' share of estimated increased utility costs within the new facilities associated with the Ames Modernization Project at the National Centers for Animal Health. The Ames Modernization Project replaces many smaller, inadequate facilities that are currently in use by APHIS. APHIS will also use \$856,000 for contracted physical moving costs for equipment, files, furniture, etc., to the new facility.

Without the requested funding, increased utility costs and physical movement costs will require resources from program operations. APHIS will lack the resources needed to maintain its recognition as a national and international reference laboratory and to meet the ISO quality assurance requirements for accreditation. In addition, the use of existing program funds will cause a reduction in the program's diagnostic capacity, and will impact the level of quality assurance activities for both the NVSL and the NAHLN. NVSL may not have the capacity to respond effectively to a major disease outbreak situation if the program has to reallocate its existing resources to fund these costs.

- (f) An increase of \$1,481,000 and 1 staff year for the Wildlife Services Methods Development program (\$17,755,000 and 162 staff years available in FY 2008).

The National Wildlife Research Center (NWRC) serves as the research arm of APHIS' Wildlife Services by providing scientific information for the development and implementation of effective, practical, and socially-acceptable methods for wildlife damage management. This helps ensure that high-quality technical and scientific information on wildlife damage management is available for the protection of crops, livestock, natural resources, property, and public health and safety. To meet higher priority methods development needs, APHIS is proposing a redirection of \$2.526 million from existing projects and an increase of \$1.481 million to provide \$1.907 million for methods development for avian influenza (AI) and to assess the risk that feral swine pose in the generation of domestic animal and human virulent subtypes of avian influenza. The Agency will also use \$2.1 million to meet security requirements.

APHIS will use \$1.907 million to conduct AI methods development research for improving environmental sample diagnostics. Agency scientists will determine the role feral swine play in generating new human virulent AI subtypes after exposure to waterfowl AI subtypes. Affordable, accurate, and efficient environmental assessments for AI environmental contamination do not

exist. Local and regional outbreaks in poultry can result in tens of millions of dollars in economic damage via culling, remediation, trade restrictions, and general loss of economic opportunities. Moreover, some subtypes of AI are human pathogens that could cause human epidemics and pandemics.

Failure to fund the AI project will lead to an increase in wildlife disease risk and missed opportunities for risk prevention management. The benefit of identifying the risks of contaminated soils and waters and of the consequences of interaction of feral swine and waterfowl will lead to management recommendations to suppress or prevent transmission of subtypes of AI from wildlife or feral swine to poultry or humans. The program's goal is to develop quick and simple environmental assessments of AI contamination and determine the risk paths for generation of agricultural and human virulent subtypes of AI.

APHIS will use \$2.1 million to provide security through the Department of Homeland Security's Federal Protective Service (FPS) and other services. Currently, the Agency is working with the General Services Administration (GSA) to construct a stand-alone wildlife disease research building that will meet bio-safety level (BSL) - 3 criteria. This building will allow NWRC to conduct more extensive wildlife disease monitoring, surveillance, and research projects than current conditions allow and will require a high level of security. Along with securing the new BSL-3 facility, the Agency will also maintain security at current NWRC facilities and field stations nationwide, which the Agency previously covered with the Homeland Security Supplemental funds.

The APHIS National Security Program exists to mitigate loss, damage, or disruption of our mission. Homeland Defense and Presidential Decision Directives have mandated that Federal agencies take specific, and in some cases, extraordinary measures to protect employees, property, assets, and research from internal and external threats, both foreign and domestic. Along with USDA officials, APHIS has conducted security assessments at all NWRC facilities. Several of our sites are in the USDA high-risk category for critical risk assets of people, high tech equipment, buildings, animals and pathogens, research data and records, and chemicals. For example, some facilities handle pathogens that can be used as weapons of terror. Therefore, it is important to have guard service and access cards to prohibit unauthorized persons in these buildings. Some facilities are also at risk of destruction by groups that oppose our mission. For example, in 1998, one NWRC field station and an APHIS Wildlife Operations office were destroyed by fire. Arson investigators from the Washington State Patrol and the U.S. Bureau of Alcohol, Tobacco and Firearms concluded the act was arson. All other NWRC facilities have been broken into at least once. To prevent these types of acts, APHIS must provide a 24 hour security system. The Department also requires any BSL-3 facility to maintain 24 hour security.

Homeland Security Presidential Directives 7 and 9 require Federal Agencies to protect critical infrastructure and resources and to defend the agriculture and food system against terrorist attacks, major disasters, and other emergencies. Without the funds for security, APHIS will not be able to meet the Presidential directives to protect critical infrastructure and resources or provide secure facilities and field stations.

(7) An increase of \$3,273,000 and 0 staff years for Management activities:

- (a) An increase of \$555,000 and 0 staff years for the APHIS Information Technology Infrastructure program (\$4,474,000 and 0 staff years available in FY 2008).

The APHIS Information Technology Infrastructure (AITI) program ultimately protects the health and value of American agriculture and natural resources by providing a robust, stable, and secure

information infrastructure, which is essential to the mission critical applications and day-to-day business of APHIS.

The Agency is currently working to expand electronic delivery of programs; improve sharing of information across the Agency; adapt and expand the use of field-based technologies; and improve coordination and accessibility of information, processes, and resources available to assist APHIS programs in the event of a pest or disease emergency. The AITI program is the key technology means for providing e-mail, office automation, Internet/Intranet access, and the platform that supports APHIS' mission critical programs and administrative applications. As the Agency grows, so too must the capacity for general support systems (GSS) (e.g., mail and Internet access) increase to accommodate the growing numbers of employees and contractors hired to carry out the strategic objectives. Continued modernization of the information technology infrastructure will include network capacity planning and management, implementation of eGov initiatives, and cyber security compliance and management.

APHIS requests an increase of \$555,000 to provide for rapidly increasing hardware and software maintenance costs, and recertify and accredit the general support system. Of the requested increase, approximately \$430,000 will be used to provide for some of the increased maintenance costs that are a direct result of a more accurate count of hardware and software licenses that are necessary to comply with numerous security initiatives.

There are three components of maintenance costs: actual license costs, support costs, and costs associated with updating software. Actual license costs are the most critical component as they represent the software that is in use and must be paid for or software which must be uninstalled. Uninstalling software is a labor-intensive task and is not always an option as there is a basic set of software that every user needs. The second component is support costs derived from the support provided from the vendor to resolve technical issues. The third component is software updates such as patches issued to correct technical problems, enhance functionality, and close security holes. The requested increase allows the AITI program to address all three components of maintenance.

APHIS will use the remaining \$125,000 to support the recertification and accreditation (C&A) of APHIS' GSS. APHIS will manage and recertify the systems as a single unit to address security requirements more effectively and reduce the C&A burden placed upon individual program units and investments. The C&A consolidation, which will now incorporate eight systems, should reduce the cost of the effort in the future for two reasons. First, each of the eight systems has had an initial C&A performed so the base documentation is complete – document creation is one of the largest labor costs in a C&A. Second, the second phase of C&A, testing, will shrink dramatically. The testing for the consolidated system will be larger than for any of the individual eight systems, but much smaller than the aggregate of the eight, which will be another reduction in labor costs. This process will ensure that APHIS continues to secure its infrastructure appropriately; make improvements to network scanning; and correct network vulnerabilities in a timely fashion.

Without the increase, both service delivery and overall security would be reduced. Alternatively, support costs would be allocated to APHIS' programs, therefore reducing funds directed towards immediate program delivery. The Agency's maintenance costs have grown dramatically over the past two years and the costs are expected to increase as the demand for service continues to grow. For example, during FY 2007, APHIS expended an additional \$1 million to pay for additional software licenses. In FYs 2008 and 2009, the Agency expects to pay between \$250,000-\$300,000 to maintain those additional license agreements.

Implementing these activities will benefit the Agency by providing a secure IT environment and ensuring that mission critical information systems are accessible on a continual basis.

- (b) An increase of \$2,718,000 and 0 staff years for the Physical/Operational Security program (\$4,161,000 and 0 staff years available in FY 2008).

Physical and operational security is a necessary measure to prevent acts of bioterrorism. APHIS has heightened its efforts to secure offices and laboratories, ensure employee safety, and prevent access to biohazardous materials by unauthorized personnel. These activities are mandated by Homeland Security Presidential Directives (HSPD) 9 and 12, and related legislation. HSPD-12 mandates that all employees and contractors be identity-proofed and issued a Federal identification (ID) card. Visible security reduces threats to our personnel, assets, and facilities. Prosecution of external threats sets examples of zero tolerance and reduces further threats. Workplace violence and threat reduction education further reduces internal threats. APHIS must continue to analyze vulnerabilities and implement needed countermeasures to provide a secure environment in which our employees can carry out the mission of the Agency and reduce risks to local communities where our laboratories and research facilities are located.

APHIS requests \$1.564 million to begin implementing the second phase of the Federal ID Card initiative as mandated in HSPD 12. The second phase of the Office of Management and Budget's Standards for the Implementation of the Federal Information Processing Standard (FIPS), which requires that the Federal ID card grant access to both physical facilities and logical computer systems, must be implemented by FY 2011. Specifically, the funding will be used to acquire Smart Cards, readers, software, and access control systems for 60 facilities, including all of the APHIS critical facilities. Eventually the Agency will be able to migrate to a system using the Federal ID card for single sign-on to all APHIS logical systems.

Without the additional funding, APHIS will be unable to fully comply with the mandate within the required timeframe. In addition, the Agency may be required to fund the initiative at the expense of mission critical plant and animal health programs. The success of the program is measured by the number of facilities upgraded to meet the mandate.

In FY 2009, the U.S. Department of State's Overseas Building Office (OBO) will continue implementation of the Capital Security Cost Sharing program. This is part of a \$16 billion effort to construct 150 new embassies over a 12 year period. All agencies with an overseas presence in U.S. diplomatic facilities will pay a proportionate share for the accelerated construction of new, secure, safe, and functional diplomatic facilities. The OBO will allocate these costs annually based on the number of authorized positions. In FY 2009, APHIS' contribution will increase by an additional \$1.154 million.

The OBO's key performance measure for the Capital Security Cost Sharing Program is the number of secure facilities constructed at high risk overseas posts to protect employees from terrorists and other security threats. Without additional funds, the Agency may be required to close offices overseas or reduce program activities conducted in foreign locations. Similarly, without APHIS' contribution, the OBO will be unable to complete construction of all secure facilities. These actions could in turn have a negative impact on critical trade relations or the likelihood of foreign animal pest and disease introductions into the United States.

## ANIMAL AND PLANT HEALTH INSPECTION SERVICE

SUMMARY OF INCREASES AND DECREASES - PROPOSED LEGISLATION

<u>Item of Change</u>	2009		
	<u>Current Law</u>	<u>Program Changes</u>	<u>President's Request</u>
Pest & Disease Exclusion.....	\$170,549,000	\$0	\$170,549,000
Plant & Animal Health Monitoring.....	282,334,000	0	282,334,000
Pest & Disease Management.....	329,927,000	0	329,927,000
Animal Care.....	22,021,000	(9,000,000)	22,021,000
Scientific & Technical Services.....	102,398,000	(10,500,000)	102,398,000
Management Initiatives.....	11,908,000	0	11,908,000
Total Available.....	<u>\$919,137,000</u>	<u>\$0</u>	<u>\$919,137,000</u>

Explanation of Proposed Legislation:

APHIS proposes legislation authorizing the Secretary of Agriculture to prescribe, adjust, and collect fees to cover the costs incurred for activities related to the review, maintenance, and inspections connected to licensing activity associated with the Animal Welfare Act, Virus Serum Toxin Act, and the Plant Protection Act to the accounts that incur the costs and to remain available until expended without fiscal year limitation. Once given the authority to implement user fees for these purposes, APHIS will initiate rulemaking with a full opportunity for interested parties and the general public to offer comments before the new fees take effect.

The Budget request assumes a three-month delay in the receipt of fees, which would result in receipts of \$19.5 million in FY 2009.

**ANIMAL AND PLANT HEALTH INSPECTION SERVICE  
SALARIES AND EXPENSES**

Geographic Breakdown of Obligations and Staff Years  
2007 Actual and Estimated 2008 and 2009

	FY 2007		FY 2008		FY 2009	
	Amount	Staff Years	Amount	Staff Years	Amount	Staff Years
<b><u>UNITED STATES:</u></b>						
Alabama.....	\$6,024,875	30	\$5,370,805	29	\$5,505,293	29
Alaska.....	1,757,855	11	1,534,751	11	1,573,182	11
Arizona.....	13,062,693	89	13,136,923	88	13,465,878	88
Arkansas.....	5,806,863	33	5,742,461	33	5,886,255	33
California.....	76,785,898	202	76,990,781	194	101,916,113	208
Colorado.....	67,654,242	412	65,731,256	395	72,076,679	402
Connecticut.....	1,969,839	15	1,915,182	15	1,963,139	15
Delaware.....	1,498,423	6	1,455,069	6	1,491,505	6
Florida.....	172,572,824	464	65,804,166	379	61,475,206	382
Georgia.....	8,837,685	52	7,885,617	51	8,083,076	51
Hawaii.....	25,630,892	237	25,707,258	234	26,350,981	234
Idaho.....	14,300,756	62	21,435,521	61	22,221,308	61
Illinois.....	12,581,154	52	14,689,465	52	15,057,297	52
Indiana.....	5,758,060	46	7,421,937	46	7,856,817	46
Iowa.....	30,457,932	201	30,893,785	198	37,592,427	202
Kansas.....	4,913,996	39	4,860,087	39	4,981,786	39
Kentucky.....	9,495,613	25	9,557,508	24	9,796,832	24
Louisiana.....	4,566,972	26	4,632,325	26	4,748,321	26
Maine.....	9,189,149	182	9,168,206	179	9,397,783	179
Maryland.....	280,035,931	1,687	270,527,458	1,661	276,431,605	1,707
Massachusetts.....	11,353,360	52	11,467,270	52	11,754,417	52
Michigan.....	14,864,259	92	18,139,798	67	19,347,212	67
Minnesota.....	28,620,361	409	29,022,156	394	29,869,280	404
Mississippi.....	11,207,374	60	11,129,832	59	11,408,528	59
Missouri.....	8,525,204	64	8,514,673	63	8,727,885	63
Montana.....	6,592,892	45	6,416,726	44	6,577,404	44
Nebraska.....	12,575,883	25	12,510,203	24	12,823,465	24
Nevada.....	3,896,011	21	3,787,747	21	3,882,594	21
New Hampshire.....	2,100,591	14	1,991,388	14	2,041,253	14
New Jersey.....	14,713,126	79	13,933,846	78	14,282,757	78
New Mexico.....	8,525,920	53	8,527,331	42	8,740,860	42
New York.....	29,239,500	159	29,260,521	157	31,248,526	160
North Carolina.....	62,643,082	310	62,237,158	307	64,053,790	309
North Dakota.....	4,840,645	32	4,826,568	32	4,947,427	32
Ohio.....	8,432,965	47	10,898,683	33	12,173,806	33
Oklahoma.....	6,519,283	29	6,507,492	19	6,670,442	19
Oregon.....	7,372,303	41	7,393,422	41	7,827,588	41
Pennsylvania.....	12,852,800	77	15,188,883	76	16,573,465	79
Rhode Island.....	586,283	8	511,532	8	524,341	8
South Carolina.....	4,405,733	35	4,205,938	35	4,311,257	35
South Dakota.....	3,831,264	16	3,770,453	16	3,864,867	16
Tennessee.....	7,352,828	63	7,303,802	62	7,735,723	62
Texas.....	77,715,448	309	78,360,316	305	81,326,744	309
Utah.....	6,678,812	42	6,283,928	41	6,441,280	41
Vermont.....	1,859,685	15	1,752,952	15	1,796,846	15
Virginia.....	6,773,155	30	6,754,024	30	6,923,148	30
Washington.....	11,942,126	61	11,854,058	60	13,027,574	60
West Virginia.....	4,405,805	23	4,205,715	23	4,311,028	23
Wisconsin.....	8,284,733	36	9,317,134	36	9,799,470	36
Wyoming.....	5,344,035	31	5,387,784	30	5,522,697	30

	FY 2007		FY 2008		FY 2009	
	Amount	Staff Years	Amount	Staff Years	Amount	Staff Years
<b>U.S. TERRITORIES:</b>						
District of Columbia	9,875,213	41	10,016,528	43	10,267,347	43
Guam	485,755	3	489,329	3	492,881	3
Puerto Rico	11,960,668	108	12,048,666	108	12,136,111	108
<b>INTERNATIONAL REGIONS</b>						
<b>AFRICA:</b>						
South Africa	436,516	2	439,727	2	437,706	2
Senegal	762,657	4	768,268	4	764,736	4
Other	328,063	2	330,476	2	323,851	2
<b>ASIA/PACIFIC:</b>						
China	335,114	4	337,580	4	336,028	4
Japan	844,282	5	850,494	5	846,584	5
South Korea	310,669	3	312,954	3	311,516	3
Other	1,676,100	10	1,688,432	10	1,680,669	10
<b>CARIBBEAN:</b>						
Dominican Republic	2,744,798	7	2,752,151	7	2,730,853	7
Other	374,291	2	389,886	2	396,739	2
<b>CENTRAL AMERICA:</b>						
Guatemala	19,480,534	29	19,623,857	29	19,533,637	36
Nicaragua	510,741	4	514,499	4	512,134	4
Panama	10,524,645	33	10,602,077	33	11,537,733	33
Other	1,445,150	4	1,455,783	4	1,449,090	4
<b>EUROPE/NEAR EAST:</b>						
Austria	240,153	2	241,920	2	240,807	2
Belgium	843,600	3	849,806	3	845,899	3
Egypt	428,290	3	431,441	3	429,457	3
Other	3,082,462	5	3,105,140	5	3,090,864	5
<b>NORTH AMERICA:</b>						
Canada	109,669	1	110,476	1	109,968	1
Mexico	12,860,262	43	12,954,878	43	12,895,289	49
<b>SOUTH AMERICA:</b>						
Argentina	57,407	1	57,829	1	57,564	1
Brazil	665,692	2	670,590	2	667,507	2
Chile	2,082,324	7	2,097,644	7	2,088,001	7
Other	1,475,154	2	1,486,007	2	1,479,175	2
<b>Total direct obligations:</b>	<b>\$1,230,897,328</b>	<b>6,480</b>	<b>\$1,130,548,333</b>	<b>6,242</b>	<b>\$1,192,069,302</b>	<b>6,349</b>

Note: Total direct obligations does not include advances and reimbursements.

## ANIMAL AND PLANT HEALTH INSPECTION SERVICE

## Salaries and Expenses

Classification by Objects2007 Actual and Estimated 2008 and 2009

(\$000)

		<u>2007</u>	<u>2008</u>	<u>2009</u>
Personnel Compensation:				
	Washington, DC.....	\$98,244	\$99,082	\$103,588
	Field.....	294,732	297,245	310,763
11	Total personnel compensation.....	392,976	396,326	414,351
12	Personnel benefits.....	118,399	119,402	124,832
13	Benefits for former personnel.....	1,152	1,157	1,210
	Total, pers. comp. & benefits.....	512,527	516,885	540,392
Other Objects:				
21	Travel & transportation of personnel.....	46,047	46,001	46,072
22	Transportation of things.....	6,594	6,258	6,268
23.1	Rent, Communications, and Utilities.....	23,283	20,282	21,314
23.2	Communication Services.....	383	534	534
23.3	Communication Services - GSA.....	14,813	18,466	18,495
24	Printing and reproduction.....	2,378	2,480	2,484
25.1	Contractual Services Performed by Other			
	Federal Agencies.....	84,431	67,931	68,037
25.2	Other services.....	4,517	4,092	4,099
25.3	Repair, Alteration or Maintenance of			
	Equipment, Furniture or Structure.....	5,744	5,723	9,532
25.4	Contractual Services - Other.....	37,856	37,221	46,879
25.5	Agreements.....	214,682	238,930	254,958
25.6	ADP Services and Supplies.....	3,287	3,749	3,755
25.7	Miscellaneous Services.....	15,942	16,132	16,157
25.8	Fees.....	762	469	470
26	Supplies and materials.....	75,073	76,155	76,274
31	Equipment.....	40,001	32,637	36,688
32	Land & Structure.....	48	22	22
41	Grants, Subsidies & Contributions.....	91,584	28,244	30,288
42	Indemnity/Compensation.....	50,773	8,168	9,181
43	Int. & Div.....	169	165	166
44	Refunds.....	0	0	0
99	Other.....	6	6	6
	Total, other objects.....	718,369	613,663	651,677
	Total direct obligations.....	1,230,897	1,130,548	1,192,069
<u>Position Data:</u>				
	Average Salary, ES positions.....	\$155,067	\$159,874	\$163,711
	Average Salary, GS positions.....	\$76,157	\$78,493	\$80,420
	Average Grade, GS positions.....	12.50	12.60	12.70

Note: Total direct obligations does not include advances and reimbursements.

## ANIMAL AND PLANT HEALTH INSPECTION SERVICE

## SALARIES AND EXPENSES

## STATUS OF PROGRAM

PEST AND DISEASE EXCLUSION

Current Activities: Through the programs in this component, APHIS works to safeguard U.S. plant and animal resources against the introduction of foreign disease and pests, while allowing the United States to meet its international trade obligations. These activities include monitoring animal and plant health throughout the world and using this information to set effective agricultural import policy. In addition, APHIS conducts offshore risk reduction activities, such as eradication of certain high-risk pests and diseases in foreign countries. APHIS uses predictive analysis to determine changes in risk to U.S. agriculture. APHIS also conducts pre-departure inspections of passenger baggage destined for the U.S. mainland and foreign commodity pre-clearance programs for specific products. In conducting these programs, APHIS works closely with multilateral organizations, such as the International Office of Epizootics, the Inter-American Institute for Cooperation in Agriculture, and the International Atomic Energy Agency. Through these organizations, we promote effective disease surveillance overseas and gain access to information on animal health issues worldwide.

Selected Examples of Recent Progress:1. Agricultural Quarantine Inspection (AQI)

Through the AQI program, APHIS and the Department of Homeland Security's (DHS) Bureau of Customs and Border Protection (CBP) work to safeguard U.S. agricultural and natural resources from the introduction of invasive pests and diseases. The AQI program encompasses a variety of activities designed to address the agricultural pest risks posed by international travel and trade. In carrying out the AQI mission, APHIS conducts the following activities to prevent the entry of foreign pests and diseases in the United States: assesses the risks associated with international trade and specific imported agricultural products and develops regulatory import policies to protect the health of U.S. agriculture and ecosystems; conducts off-shore risk reduction activities including pre-departure inspections of passenger baggage destined for the U.S. mainland from Hawaii, Puerto Rico, and other Pacific and Caribbean islands and foreign commodity pre-clearance programs for specific products; trains agricultural inspectors and detector dog teams to work at U.S. ports of entry; fumigates arriving containers and cargo; validates treatments; inspects and quarantines imported plant propagative materials; conducts trade validation and compliance activities to prevent smuggling through the Smuggling Interdiction and Trade Compliance program; and provides the scientific support necessary to carry out these activities and those carried out by CBP.

Cooperative Program Management

With the creation of the DHS in FY 2003, the responsibility for conducting agricultural port inspections of international passengers, passenger baggage, mail, and means of conveyance at U.S. ports of entry and certain off-shore locations transferred to CBP. APHIS and CBP are committed to working cooperatively to ensure the safety of the United States, its food production, and its ecosystems. To enhance the program's efficiency APHIS and CBP established a joint task force and undertook a review in April 2007. The task force included employees from various levels in each organization. This task force looked at data from internal quality assurance reviews and reports of both USDA's and DHS's Offices of Inspector General and the Government Accountability Office. The group also evaluated stakeholder concerns as expressed in correspondence and at a stakeholder listening session conducted in May 2007.

APHIS and CBP officials also conducted a joint quality assurance program to ensure that agricultural inspection policies are effective. As part of the quality assurance effort, APHIS and CBP conduct port reviews to evaluate operations at individual ports and identify any problems or needs. During FY 2007, APHIS and CBP conducted seven port reviews at maritime ports, airports, and land border crossings. Eight reviews are planned for FY 2008. The review teams observed CBP's agricultural operations at the ports and made recommendations for improving operations based on proven agricultural procedures and recognized various quality initiatives that the ports achieved that other ports could benefit by implementing.

#### Inspections and Pest Interceptions

During FY 2007 a total of 129.8 million international passengers/pedestrians entered the United States as air, vehicle, maritime passengers and pedestrians. Agricultural inspectors inspected the baggage of nearly 25.8 million of these international passengers/pedestrians. Passenger baggage is inspected manually, with x-ray technology, or through the use of detector dogs. Agricultural inspectors also cleared 52,000 ships and 19.2 million cargo shipments during FY 2007. In total, agricultural inspectors intercepted 71,565 reportable pests at land borders, maritime ports, airports, foreign sites, and post offices.

#### Pre-Clearance and Pre-Departure

APHIS conducts pre-clearance activities abroad and pre-departure activities to reduce agricultural risks at off-shore locations. These activities allow PPQ to deal with high-risk fruit, vegetable and plant imports in the country of origin, prior to export to the United States. The pre-clearance program provides a number of economic benefits and cost saving measures for the exporting and importing community by decreasing the cost of phytosanitary inspection and reducing delays at ports of entry.

Using appropriated funding under the AQI line item, APHIS conducts pre-departure inspections of passengers traveling from Hawaii, Puerto Rico, and other islands to reduce the threats of agricultural pests and diseases before the passengers reach the mainland United States. In FY 2007, APHIS inspected the baggage of 19.2 million passengers before their departures from Hawaii and Puerto Rico. APHIS tracks the success of these efforts through the number of Mediterranean fruit fly outbreaks in the mainland United States that can be traced to Hawaii. The program met its performance target of zero such outbreaks in FY 2007.

In 2007, red palm mite was detected in Puerto Rico. This leaf damaging mite is a pest of coconut, acacia palm, and date palms. It has the potential to cause serious economic damage to southern regions of the contiguous United States, its island territories, and Hawaii. APHIS is taking additional measures have been taken to prevent its movement from host material, coconut seeds and cut flowers.

APHIS also cooperates with the U.S. Department of Defense through reimbursable agreements to inspect military passenger baggage and equipment prior to its returning from overseas. Heavy military equipment is frequently encrusted with soil that can harbor a variety of agricultural pests, including invasive weed seeds, live insects and snails, and even disease organisms like foot-and-mouth disease. During FY 2007, APHIS participated in military pre-clearance operations in Nicaragua, Cuba, Haiti, El Salvador, Panama, Honduras, and Jamaica. APHIS also established a permanent position to oversee military pre-clearance in the U.S. Central Command at MacDill Air Force Base, Florida. This position will coordinate the extensive inspection of returning cargo, vehicles, and passengers from Kuwait, Iraq, and Afghanistan. Expansion of this program to other countries with U.S. military presence, such as Qatar and Kyrgyzstan, is under consideration. These initiatives will help ensure that returning military personnel and equipment can enter the United States smoothly while protecting U.S. agriculture.

APHIS also conducts foreign commodity pre-clearance programs in 29 countries, facilitating the safe import of more than 168 commodities. The goal of pre-clearance, an activity which importers pay for through trust funds, is to minimize pest and disease risks away from the United States and allow trade to occur more smoothly by allowing highly perishable products to move to markets without additional delay.

In addition to traditional pre-clearance programs for fruits, vegetables, and flower bulbs, the program certifies greenhouse geranium cutting facilities throughout the world, to safeguard against potential introductions of *Ralstonia solanacearum*, (Race 3 Biovar 2) to the United States. Pre-clearance programs have also been established in Thailand and India to allow the United States to import and export irradiated tropical fruits with these countries. Additional programs for irradiated fruit are anticipated in the near future.

#### Smuggling Interdiction and Trade Compliance (SITC) Program

SITC's mission is to detect and prevent the unlawful entry and distribution of prohibited and non-compliant products that may harbor exotic plant and animal pests and diseases. Supported by AQI user fees, its officials analyze potential smuggling pathways, conduct product traces, and coordinate with investigative organizations to increase compliance with APHIS' regulatory requirements. In FY 2007, SITC made seizures totaling 300,000 pounds of illegal plants and plant products, as well as meat and meat products including poultry, beef, and pork, and dairy products.

Preventing the introduction of Avian Influenza (AI) into the United States continued to be a primary focus for Smuggling, Interdiction and Trade Compliance (SITC) in 2007. SITC's role is to prevent prohibited AI products from entering and to identify such products that have made their way into U.S. commerce. SITC exceeded all agency targets for AI performance measures for FY 2007. A total of 421 seizures totaling 123,527 pounds of AI products were made during FY 2007. In addition, SITC Analysts provided information to CBP personnel regarding a possible shipment of poultry products entering the United States through maritime cargo in New Jersey. CBP targeted two containers, one of which had over 24,200 pounds of smuggled prohibited products, mostly fresh frozen whole geese, chickens, and geese intestines, from China.

SITC also initiated 19 product retractions (recalls), 14 of which were for animal products, and the remaining recalls were for illegal snails and other prohibited miscellaneous products.

#### Plant Inspection Stations

In its review of APHIS' plant health safeguarding efforts, the National Plant Board identified the import of nursery stock and other propagative plant materials as a significant pathway for invasive diseases. To reduce the risks associated with such imports, APHIS requires certain imported plant materials to enter the United States through one of 17 plant inspection stations, which are supported by AQI user fees and mostly located at major ports of entry. APHIS inspectors and identifiers at these stations inspect shipments to ensure that imported plants are not harboring pests and diseases of regulatory significance. In FY 2007, Agency inspectors cleared 28,640 shipments containing over 1.3 billion plant units (cuttings, whole plants, or other propagative materials), over 5.72 million pounds of seeds, and intercepted more than 3,100 reportable pests. The program also developed and distributed plant inspection station construction guidelines which incorporate previously developed Plant Inspection Station standards. In the last two quarters of the fiscal year, APHIS worked with its stakeholders to develop a strategic plan for plant inspection stations which will be implemented by the second quarter of FY 2008.

#### Risk Analysis and Scientific Support

The Plant Epidemiology and Risk Analysis Laboratory (PERAL) at APHIS' Center for Plant Health Science and Technology develops pest risk analyses and epidemiological approaches to pest exclusion. In FY 2007, PERAL completed 182 risk analyses associated with imports, exports, invasive pest threats, and programmatic requirements. These analyses provided the possibility to authorize 59 new commodities for import from 21 countries, and opened or expanded U.S. export markets for 16 additional commodities. PERAL's Pest Advisory Group evaluated 58 new pests, 31 of which were new for the United States.

The Treatment Quality Assurance Unit developed or improved five quarantine treatments for commodities of trade. New treatment schedules were added for a variety of imported commodities, including carambola, litchi, longan and sand pear. The program added additional commodities and reworked the irradiation series to reflect the use of generic doses based on the pest of concern. The wood packing material schedule was modified to align with the International Standards for Phytosanitary Measures (ISPM)-15.

These activities are supported by AQI user fees.

#### Export Certification

APHIS facilitates the export of agriculture shipments through the use of EXCERPT, an electronic database containing plant health import requirements for over 200 countries. APHIS export certifications are provided as a service to U.S. exporters and help ensure U.S. products meet the agricultural requirements of the country of destination. Over 2,500 authorized certification officials, including APHIS officers and county and state plant regulatory officials, can access information on foreign countries' phytosanitary certification requirements on-line.

Once the requirements are verified, the authorized certification officials conduct inspections on the materials and the appropriate export certificates are issued. These export certificates facilitate the entry of commodities into foreign markets and represent approximately \$25 billion in trade annually. In FY 2007, more than 400,000 Federal plant health export certificates for agriculture shipments were issued.

Also in 2007, APHIS continued the implementation of its new Phytosanitary Certificate Issuance and Tracking (PCIT) database. PCIT allows exporters to apply for certificates and schedule inspection appointments on-line. It also provides APHIS with the ability to capture export application information; document inspection and certification information; print an original phytosanitary certificate on secure paper; and generate export reports. Use of the PCIT system increased dramatically in FY 2007 with 66,403 phytosanitary certificates issued and 40 States utilizing the system. The new system has been used by 217 duty stations. APHIS will continue expanding the system in FY 2008 with seminars for both government and industry users and visits to selected sites. APHIS has also been discussing the possibilities of exchanging phytosanitary certificates electronically between the associated governmental organizations. This work will continue through a number of international bodies and bilateral meetings in FY 2008. In FY 2007, APHIS' web-based training reached over 5,000 government and industry participants. This has proven to be a cost effective means to address the cost of on-site training for such a large number of people. APHIS supports these activities through the collection of user fees for phytosanitary certificates.

#### 2. Cattle Fever Ticks

The Cattle Fever Tick program was the first cooperative State-Federal eradication effort in the United States. Two Species of cattle ticks, *Boophilus annulatus* and *Boophilus microplus*, were identified and eradicated from 14 southern states and a portion of southern California, with the exception of the permanent quarantine zone between Texas and Mexico. Today, the permanent quarantine zone extends about 580 miles from Del Rio, Texas, to the Gulf of Mexico, ranging from 200 yards to six miles in width.

Among other things, the program conducts range inspections of all premises located in the quarantine zone every 14 days. Also, APHIS inspectors, known as tick riders, carry out river patrols to apprehend stray of smuggled cattle and horses, and thus prevent the introduction of cattle fever ticks into the United States from Mexico. By carrying out this program, APHIS prevents cattle tick outbreaks throughout the United States.

During FY 2007, APHIS horseback river patrols along the U.S.-Mexican border apprehended a total of 71 Mexican livestock compared to 97 livestock in FY 2006. Out of 28 cattle apprehended, five were infested with cattle ticks. Out of 42 horses apprehended, nine were infested with cattle ticks.

There has been a significant increase in the number of infested premises identified outside of the quarantine zone. As of September 2007, there were 25 infested premises outside the quarantine zone as compared to nine in 2006, a 177 percent increase. Further, the situation in the quarantine zone has deteriorated. As of September 2007, 42 infested premises were found in the quarantined area as compared to 37 by September 2006. These outbreaks can likely be attributed to the following factors: increasing number of deer and exotic ungulates maintained on "hunting ranges" in the area that serve as alternate hosts of cattle ticks in the absence of cattle; commingling of livestock with free ranging wildlife animals that perpetuate tick populations; unrestrained movement of wildlife animals, spreading ticks in and out of the quarantine zone; reduction in surveillance for Mexican stray and smuggled livestock along the Rio Grande River as a result of having to deploy existing APHIS resources into eliminating infestations outside of the quarantine zone; increased abundance of white-tailed deer and other cervids, along the Mexican bordering states which move freely across national borders, or shallow rivers, and crisscross the Rio Grande River; and, environmental changes in weather patterns, climate, and vegetation creating suitable microhabitats for the ticks.

The high number of outbreaks has precipitated the implementation of temporary quarantines outside the permanent quarantined area in Starr, Maverick, Dimmit, Webb, and Zapata counties. Premises and livestock within the temporary quarantined area must be systematically inspected and treated, and movement of all livestock must be controlled.

The increased number of wildlife animals serving as alternate hosts of cattle ticks within the permanent quarantined area aggravates eradication efforts and activities, as the program is limited to two strategies for controlling ticks on wildlife animals. APHIS evaluated ivermectin-medicated corn feeders to eradicate ticks on wildlife. The deer feed on the corn that is medicated with an anti-parasitic drug. Since the Food and Drug Administration bans the use of medicated corn feeds 60 days before, during the hunting season (November through February), and for 60 days after the hunting season, APHIS continues to evaluate the alternative method of the four-poster roller treatment feeder. The four-poster applies acaricide to the head, neck, and ears of the deer as they feed on whole kernel corn. The apparatus does not cost more, but it can be used throughout the year. APHIS will continue to evaluate both strategies for reducing tick infestation in wildlife populations.

Introduction of acaricide-resistant populations of cattle fever ticks from Mexico could prevent the program from reaching its goals. APHIS does not currently have the technology to eradicate these resistant ticks. Experience in other countries has indicated that once established in a tick population, acaricide resistance is impossible to eliminate. Furthermore, chemical companies in the United States are not actively developing new acaricides. Most companies are discouraged from developing new products to control ticks on livestock because of the relatively limited market for such products combined with the extremely high development costs, including costs associated with registration requirements of the Environmental Protection Agency. APHIS continued working with USDA Agriculture Research Office, the Food and Drug Administration, and the Environmental Protection Agency pursuing other options for the use of macrocyclic lactones.

Currently, the cattle tick program is authorized under myriad enabling laws, rules, memoranda, and supplements, including 9 CFR, part 72; VS Memorandum No. 556.1 and Supplements; Chapter 167 of the Texas Agriculture Code; Chapter 41 of the Texas Administrative Code; and about 200 policy statements regarding tick activities. During FY 2007, APHIS conducted a comprehensive review of the program and updated 9CFR part 72, seven VS Memorandum, and created two new VS Memorandum addressing certain safety aspects of the program.

### 3. Foot-and-Mouth Disease and Foreign Animal Diseases

APHIS' safeguarding strategy in a global context has shifted from a reliance on inspection and exclusion activities at U.S. borders to placing a greater emphasis on working overseas and collaborating with foreign governments on programs to monitor and respond to invasive species threats before they spread to the

United States. The Agency's Foot-and-Mouth Disease (FMD) and Foreign Animal Diseases (FAD) program protects the United States from the risk of exotic animal diseases. The Agency detects and controls outbreaks of FADs throughout the world by participating in cooperative animal disease eradication programs, reducing the risk of these diseases spreading to the United States. The Agency also conducts animal health capacity building activities in foreign countries to monitor and control animal diseases and maintains a presence of animal health professionals throughout the world. Overall, these efforts support the goal of protecting the United States from the risk of FADs.

APHIS conducts activities to minimize the risks of classical swine fever (CSF), FMD, and other FADs worldwide. In FY 2007, the Agency met its performance targets of no cases of FMD in Central America and Mexico and no FADs introduced into the United States. The following paragraphs highlight activities by regions.

#### North America

APHIS began working with Canada and Mexico to establish standard FAD diagnostic procedures for FMD and other vesicular diseases, avian influenza and bovine tuberculosis. We worked together to add reverse transcription polymerase chain reaction (PCR) diagnostics for FMD and avian influenza (AI). APHIS benefits from this state-of-the-art diagnostic technology by having available another off-shore laboratory in Mexico for surge capacity in the event of a major catastrophic FAD outbreak.

APHIS continued its partnership in the Mexico-U.S. Commission for the Prevention of FMD and other FADs. This Commission supports an animal health laboratory in Palo Alto, Mexico, which has Bio-Security Level 3 (BSL-3) certification. This laboratory will provide APHIS with surge capacity in the event of an FAD outbreak in the United States. In FY 2007, the laboratory tested over 100,000 samples for many diseases including cattle diseases such as FMD and vesicular diseases, horse diseases such as equine encephalopathy and West Nile virus, and poultry diseases such as highly pathogenic avian influenza (HPAI) and exotic Newcastle disease (END). Scientists reported all samples for FMD and HPAI negative and sporadic samples of END positive. Additionally, a network of six Mexican laboratories tested 200,000 cattle for bovine spongiform encephalopathy (BSE), with no positive or suspect cases detected. To stop FADs from entering the United States near the border, APHIS' National Wildlife Research Center worked with the Texas A&M Caesar Kleberg Wildlife Research Institute to conduct surveillance for cattle fever ticks (a vector for bovine babesiosis) in Northern Mexico on ungulate hosts including antelope and other exotics and to conduct landowner surveys to document total land use changes near the Rio Grande along the U.S.- Mexico border as it relates to cattle and deer management and to determine landowner knowledge of cattle fever tick issues.

#### Central America

APHIS and Panama's Ministry of Agriculture maintain a BSL-3 laboratory that analyzes all samples for vesicular diseases from Central American countries. The laboratory is now using the real-time PCR test for the diagnosis of vesicular diseases and other disease conditions including AI and FMD. In FY 2007, the laboratory tested 1,173 samples for Central America and Panama. Of those, officials reported 723 cases of vesicular stomatitis (New Jersey serotype), 18 vesicular stomatitis (Indiana serotype), and no cases of FMD. APHIS has also collaborated with ministries of agriculture in Costa Rica, Honduras, and Nicaragua to survey for and prevent FADs in those countries.

#### South America

South America has one of the largest cattle populations in the world, which continues to circulate the FMD virus. APHIS cooperates directly with the Colombian Agriculture Institute (ICA) to eradicate FMD in Columbia and works with the Inter-American Institute for Cooperation in Agriculture, the United Nation's Food and Agriculture Organization, the World Animal Health Organization (OIE), Pan-American Health

Organization/Pan-American Center for Foot-and-Mouth Disease and other international organizations in Ecuador, Venezuela, Bolivia, and Paraguay.

The program in Colombia continues to conduct nearly 1,000 field investigations of cattle with symptoms that could indicate FMD each year. To enhance surveillance activities, APHIS and ICA implemented a geographic information system mapping project to identify and locate centers of cattle population. APHIS also supports FMD eradication activities in Bolivia with significant recent success. The OIE continue to recognize the Chiquitania region in the department of Santa Cruz, and the department of Oruro, "free of FMD with vaccination." Only a few years ago, Bolivia was considered the source of the virus for surrounding countries. Targeting activities to the highest risk regions (the Departments of Beni and Pando) has been a critical and successful strategy for eradication success. In contrast to recent successes in Colombia and Bolivia, other parts of South America are still struggling with eradication. Three critical areas are Venezuela, Ecuador, and the Chaco Region comprised of parts of Paraguay, Argentina, and Bolivia. In these areas, APHIS is helping to support veterinary laboratories, create emergency response units, establish movement control posts, and support vaccination campaigns, among other things. Efforts in these areas are important in protecting not only the advances that have been made in Colombia over the past 30 years, but are also critical to the goal of hemispheric eradication.

#### Caribbean

APHIS continued to support control and eradication of CSF on Hispaniola in both the Dominican Republic (DR) and Haiti.

In the DR, the Agency continues to implement the 2005 to 2009 Strategic Plan for CSF Eradication. The plan includes an enhanced vaccination campaign for two years and an epidemiological surveillance system to monitor the complete situation of the virus in the DR. At this time the DR's swine population is 8 million, with approximately 1.2 million animals vaccinated, and a disease prevalence rate at 6 percent.

In FY 2006-2007, the swine population in Haiti was 800,260, with approximately 80,000 at the border with the DR. Overall, the Agency has vaccinated a total of 10.4 percent of the total swine population and 71 percent of the swine population along the border. Of the 2,090 pigs tested for CSF, Agency officials reported 6 percent positive (138) and 0.8 percent at the border.

On July 2007, the DR and Haiti agreed to strengthen and harmonize their surveillance and eradication plans by increasing their collaboration at the border provinces of each country. APHIS' objective is to support the creation of a six mile buffer zone along the border between the two countries in the next three years.

#### Africa and the Middle East

APHIS continues to strengthen its relationship with international organizations and host countries in the region despite difficult political situations in many of the countries. The Agency works with ministries of agriculture to transfer knowledge of animal disease and veterinary infrastructure and assists in disease outbreaks. For example, the Agency helped respond to an FMD outbreak in Israel in wild gazelles and conducted field tests with a new disease tracking technology that could be used in aerial surveillance in the United States in the event of FMD outbreaks in wildlife. The Agency also collaborated with the Centers for Disease Control and Prevention (CDC) and the Government of Kenya during the Rift Valley Fever outbreak early in 2007.

APHIS also conducts diagnostic training to improve veterinary health infrastructure in other countries. In West Africa, APHIS trained veterinarians from 11 countries in FAD diagnostics. APHIS conducted emergency response training in Ethiopia for 20 veterinarians. The Agency sponsored official animal health personnel from 17 countries for key international animal health meetings, emergency preparedness training, foreign animal disease, basic laboratory and epidemiology training. APHIS provided an assessment of animal health laboratories in Uganda and Kenya and provided equipment for the laboratories in Egypt,

Kenya, and Uganda. APHIS conducted its seventh international training course on Trans-boundary Animal Diseases (TADs) for international participants at Plum Island. This two-week intensive course provided practical training in recognition of 14 important foreign animal diseases. APHIS continues to serve as a member of OIE's Middle Eastern Steering Committee for the Global Framework for the Progressive Control of TAD. This committee's objective is to develop regional strategies to control and eradicate foreign animal diseases.

#### Asia

APHIS works with ministries of agriculture to strengthen animal health status and continue to safeguard the United States from the risk of FADs of this region. For example, APHIS trained participants from China and Mongolia on TADs. Also in China, our overseas office has reported on and continues to monitor the Porcine Reproductive and Respiratory Syndrome outbreak. Our knowledge of outbreaks around the world assists Agency officials in making policy decisions, such as where to conduct risk assessments or when to initiate rulemaking for certain commodities.

#### 4. Fruit Fly Exclusion and Detection (FFED)

APHIS' FFED program, with both domestic and international partners, is conducting a wide range of activities to protect the health and value of American agricultural resources threatened by the establishment of exotic fruit fly populations. The program has developed a strategic plan for FY 2006- 2010, which includes three goals to prevent establishment of exotic fruit flies. The program's accomplishments that support these goals are described below. FFED's long-term performance measure is the number of outbreaks of exotic fruit flies in the United States. The FY 2007 target was two, but the program experienced three fruit fly outbreaks. One of the outbreaks was in the Los Angeles basin of California, one was in the Dixon area of California southwest of Sacramento, and one was in the Laredo area of Texas. The program eradicated two of these outbreaks in FY 2007 and will eradicate the third in FY 2008.

##### Enhance detection and response capabilities and strengthen preventive release programs

In 2007, 46 Oriental fruit flies were detected in 24 areas of California with the need for only one regulatory action in the Santa Ana area of Orange County. The program eradicated this pest through chemical control by applying spot bait stations in the area surrounding detection sites. In the Dixon area of Solano County, 13 adult and 62 larval Mediterranean fruit flies (Medfly) were detected in September of 2007, which triggered regulatory action and the initiation of a Federal quarantine on September 20, 2007. The program is using sterile insect technique (SIT) as the main means of control by releasing sterile male Medflies at a rate of 250,000 sterile male Medflies per square mile per week over an area surrounding the detection sites. This quarantine will extend into FY 2008. Also in September 2007, there was a single detection of an adult Medfly in the San Jose area of Santa Clara County that triggered an emergency response.

In addition, the program made additional detections that did not require regulatory action: 6 detections of guava fruit fly in 4 separate areas, 2 detections of Melonfly in 2 separate areas, 5 detections of Mexican fruit fly (Mexfly) in 2 separate areas and 2 detections of peach fruit fly in 2 separate areas. APHIS and the state also worked to release sterile Medflies under a Preventative Release Program (PRP) in the Los Angeles Basin area.

The detection of a single mated female Mexfly in the Laredo area of Webb County triggered regulatory action. APHIS responded to the outbreak by releasing sterile flies in the area surrounding the detection site at a rate of 375,000 to 400,000 sterile male Mexflies per square mile per week. A Federal interstate quarantine was initiated on April 24, 2007 and the quarantine ended on September 24, 2007.

In Florida, APHIS and the Florida Department of Agriculture and Consumer Services (FDACS) continued to maintain approximately 56,000 fruit fly detection traps statewide. There was a single detection of an adult fruit fly, identified as being part of the Oriental fruit fly complex, which resulted in intensified surveillance activities but no additional control or regulatory actions. APHIS and the State also worked to release sterile Medflies under a PRP in three areas. Florida's PRP continues to demonstrate success, with no Medflies detected since 1998. In addition, APHIS cooperated with other State and territorial plant regulatory agencies to maintain fruit fly surveillance programs in 10 additional States and territories: Alabama, Arizona, Georgia, Hawaii, Louisiana, Mississippi, New Mexico, Puerto Rico, South Carolina, and the Virgin Islands. The program detected no exotic fruit flies in any of these States or Territories in FY 2007.

The program's rapid response to detections has bolstered the ability of impacted growers to maintain international and interstate trade of host commodities while avoiding the cost of fumigation treatments. During the course of FY 2007, the program placed 238 square miles under quarantine in the United States as a result of fruit fly outbreaks. This was reduced to 114 square miles by the end of the fiscal year. This number is down from 452 in the previous year. The program met its target of zero detections under a preventive release program that resulted in an outbreak.

##### Ensure Medfly does not move north of the State of Chiapas, Mexico

APHIS works cooperatively with Mexico and Guatemala in the Moscamed Program, which for the past 30 years has protected U.S. agriculture by preventing the northward spread of Medfly populations out of Central America. In FY 2007, the Moscamed Program helped maintain the Medfly-free barrier zone. This barrier is a crucial part of the APHIS strategy to reduce the risk of Medfly outbreaks in the United States.

In FY 2007, APHIS officials reported a total of 262 outbreaks in the free area and 2,155 outbreaks in the barrier area. This is a considerable increase compared to FY 2006 when there were 9 outbreaks in the free area and 288 outbreaks in the barrier area. The Program attributes the high level of outbreaks to many uncontrollable factors, such as rainfall, coffee prices, and regulatory enforcement by the governments of Guatemala and Mexico. Typically, the Program observes fewer flies after heightened rainfall because wet conditions cause pupae to rot in the soil before they emerge from the egg. However, the effect of the heavy rainfall usually takes place in the following year. Rainfall near the Guatemala-Mexico border was normal in 2006 and heavy in 2007; therefore, the Program expects to see fewer outbreaks in 2008. The Program also considers coffee prices to be another influential factor to the number of outbreaks. Currently, coffee prices are higher than average, which means producers harvest less berries. These berries are a host to flies and if there are more berries, there are better conditions for fly reproduction. To prevent further outbreaks, the Moscamed Program produced 50 million more Medfly pupae per week than planned—totaling an average of 1.7 billion per week. Furthermore, when outbreaks are on the rise, the Program moves to pesticide applications, which drop the levels low enough so sterile males impact the population. The Program cannot conduct ground applications in the mountainous coffee area, thus aerial applications are necessary but are not popular in the local area. The Program has not conducted aerial applications since 2005, but plans to in 2008.

*Eradicate Mexfly from Texas and northern Mexico along the Lower Rio Grande Valley (LRGV) and maintain the area free of reintroduction*

In the LRGV of Texas, increased program activities reduced the number of detections of Mexfly from 26 in FY 2006 to 1 in FY 2007. The program also met its target of no detections under a PRP that resulted in an outbreak.

The program's FY 2007 target for Mexfly-free Texas counties or Mexican municipalities in the Lower Rio Grande Valley was one, but zero counties or Mexican municipalities have been declared Mexfly-free. However, the administrative process has been initiated to remove one county (Willacy County) from quarantine which should be completed in FY 2008. The program released only 110 million, of the target 150 million, sterile Mexflies per week in the LRGV of Texas due to a lack of diet materials.

In Mexico, APHIS maintained an emergence center in Reynosa, Tamaulipas, Mexico. This enabled the Agency to release sterile insects on Mexico's side of the border and protect citrus production in Texas. The Agency also kept a trap line along the border with both California and Texas to provide an early detection tool for the northern movement of exotic fruit flies from Mexico. To further protect the United States, APHIS conducts a sterile release program along the border of California and Texas to suppress Mexican fruit fly activity.

## 5. Import/Export

To safeguard U.S. agriculture and facilitate safe agricultural trade, APHIS experts work closely with other Federal agencies, States, foreign governments, and industry to prevent the introduction of foreign animal diseases. Animal health experts negotiate export and import protocols, for animal products, that are founded on sound scientific principles and fair trading practices. Moreover, APHIS sets specific requirements under which animal products can be imported or exported. This helps to ensure that global markets can be accessed, expanded, or maintained with little risk to U.S. agriculture.

In FY 2007, APHIS conducted the regulatory oversight for the importation of 11.54 million head of livestock. This included 2.2 million cattle, 9.3 million swine, 26,407 horses, 12.5 million live poultry, 21.5 million hatching eggs and 5.7 million units of semen and embryos. For animal products imports, APHIS reviewed and issued 7,907 permits. Of that number, 2,915 were new permit applications, 1,090 amended permit applications and 3,902 were renewed permit applications.

Cattle imported from Mexico decreased slightly from 1.2 million in 2006 to 1 million in 2007. Compared with FY 2006, the imports of Canadian cattle in FY 2007 is holding steady at 1.1 million.

In addition, APHIS continues to upgrade and implement ePermits. ePermits is a web-based system tool for the import permitting process that allows users to apply for a permit, check the status of applications, and view issued permits and more on-line.

APHIS recognizes that the disease risks associated with the importation of animals and animal products may be tied to climatic, geographical, and biological factors within the exporting country that are not always defined by national political boundaries. This approach is consistent with our obligations under international trade agreements. To help ensure that our standards for regulating imports and assessing that disease risk within defined regions are transparent and applied on a consistent and scientific basis, APHIS conducts import risk analyses that evaluate the animal health status of countries and/or regions requesting approval to export animals and/or animal products into the United States. In FY 2007, APHIS' animal health status evaluations resulted in the following rulemaking activities.

Argentina: Published a proposed rule to recognize the region of Patagonia as free of foot-and-mouth disease (FMD).

European Union: Published a proposed rule to recognize four new Member States (i.e., Czech Republic, Latvia, Lithuania, and Poland) as low risk for classical swine fever (CSF). The rule would also recognize all four Member States as free of swine vesicular disease (SVD), and Latvia and Lithuania as free of FMD.

Mexico: Published a final rule recognizing the State of Nayarit as free of CSF.

In addition, import risk analyses were completed for multiple regions. In Argentina the risk of exporting fresh beef from a region north of the 42<sup>nd</sup> parallel that vaccinates for FMD was analyzed. A similar analysis was conducted in Brazil regarding the export of fresh beef from a region comprised of several States that continue to vaccinate for FMD. Estonia underwent a risk analysis concerning their CSF and SVD status. Slovakia also was subject to risk analysis regarding the statuses of CSF, FMD, and SVD. Mexico analyzed the current status of bovine tuberculosis in certain Mexican states and zones.

In FY 2007, APHIS also developed extensive information packages and/or responded to questionnaires from various countries in an effort to retain or reopen export markets or expand market access. Findings of notifiable avian influenza (NAI) led to a number of State and national bans on the export of U.S. poultry and poultry products. Detailed information was sent to a number of countries in order to limit the scope of the bans and to request and justify the lifting of restrictions.

Information was also provided to address a number of other trade issues, including bovine spongiform encephalopathy (Japan, Korea, Colombia); pseudorabies (Jamaica); cattle and swine health and veterinary infrastructure (Malaysia); contagious equine metritis (Panama); exotic Newcastle disease (Chile); and scrapie (Cuba).

APHIS issued point-of-origin certificates for the export of 270,815 head of livestock, 35.7 million live poultry, 82 million hatching eggs, 25.3 million day-old chicks, 7.5 million live fish, including mollusks and crustaceans, 279.5 million aquatic embryos and eggs, 12.6 million doses of bovine semen, 47,976 bovine

embryos, 19,109 units of porcine semen and embryos, 34,691 equine semen and embryos, 71 zoo animals, and 176 cervids.

APHIS developed, modified, or successfully negotiated 42 protocols for export of animals and animal products during FY 2007. Approximately 111,223 Animal Products Health Certificates were issued, and 42 markets were retained, restored, or newly opened for international trade in animal products.

These protocols will lead to millions of dollars in new trade opportunities for American producers. For example, APHIS provided in-depth information and conducted extensive trade negotiations that reopened numerous markets for ruminant products following the United States receiving the World Organization for Animal Health (OIE) bovine spongiform encephalopathy (BSE) status of Controlled Risk. APHIS also maintained and reopened markets by negotiating animal health certification requirements for U.S. poultry products and by providing epidemiologic, surveillance, and other data that enabled trading partners to accept the zoning of poultry diseases within the United States.

#### 6. Screwworm

The screwworm fly is a parasite that attacks all warm-blooded animals including humans. Infested animals, unless detected and treated, will eventually die from the infestation or from secondary bacterial infection. This parasite has caused significant losses to the livestock industries of the Americas through death and weight loss, and increased veterinary, labor, medicine, and insecticide costs.

APHIS' Screwworm Program prevents infestation of screwworm in the United States by working with Mexico and countries in Central America. Together, we have eradicated the pest from all Central America to the Darien Gap, between Colombia and Panama. APHIS produced 110 million sterile screwworm flies per week during FY 2007, 50 million more than planned. The program released approximately 27 million flies per week to maintain the barrier at the Darien Gap. Additionally, the Agency also provided flies for Jamaica. Officials declared Panama technically free of screwworm on July 12, 2006. However, Agency officials detected 7 cases of screwworm in Panama in FY 2007. The cases were located in the Panamanian Province of Darien in the program's control area, which is forested area and largely uninhabited. There was no northward spread from the control area, and there were no cases registered in other Central American countries.

In FY 2007, the Screwworm Program began moving into the newly built rearing facility in Pacora, Panama. The program started hiring engineering and production staff to work at the facility, and the program's administration moved into the building. Additionally, the program began implementing biosecurity measures of the facility and by November 2007, the entire facility was biosecure. The Agency also received the first x-ray sterilizing unit and trained staff to work with this equipment. In September 2007, the Agency initiated minimal production of screwworm flies; the X-Ray unit became functional in October 2007; and, screwworm flies were successfully sterilized for the first time at the new production facility. The facility will continue gearing up for full-scale production and is expected to be fully operational in winter 2009.

#### 7. Trade Issues Resolution and Management (TIRM)

Sanitary and phytosanitary (SPS) standards and requirements are complex factors affecting agricultural trade. Because of its technical expertise and regulatory authority, APHIS plays a central role in resolving technical trade issues to ensure the smooth and safe movement of agricultural commodities into and from the United States. SPS related activities ensure economic and marketing opportunities for farmers, ranchers, and other agricultural food producers.

APHIS' role in these negotiations is to: negotiate the animal and plant health certification requirements; assist U.S. exporters meet foreign regulatory requirements; ensure that such requirements are technically

justified and no more restrictive than necessary; and, provide any additional technical information and support necessary to demonstrate the safety of U.S. agricultural products destined for foreign markets.

#### Trade Resolution

In the first three quarters of FY 2007, APHIS personnel were successful in resolving 24 SPS export issues on the USDA's strategic SPS List. The List identified 72 strategic export issues for the year. The dollar value of these accomplishments is estimated to be \$1.64 billion.

These 2007 SPS trade accomplishments include: breeding cattle to Canada; Idaho potatoes to Mexico; horticultural exports to Brazil; seed potatoes to Sri Lanka; peas and pulses to India; pet food and vaccines to India; cherries to China; chipping potatoes to Japan; pet food & non-ruminant products (porcine blood products) to Taiwan; animal exports to Russia; poultry to Mexico; stone fruit to Mexico; grapes to Australia; breeding poultry to EU (chickens, day-old chicks, and hatching eggs); cattle to Morocco; beef to Malaysia; and, poultry to Korea.

#### Trade Facilitation (Released Shipments)

APHIS attachés posted overseas play an active role in resolving urgent problems involving U.S. shipments detained at foreign ports of entry. Shipments of U.S. commodities can be detained in foreign ports for a number of reasons. The importing country's authorities may question a phytosanitary or veterinary certificate or may incorrectly interpret their own requirements. Sometimes there are concerns about recent media reports (official or unofficial) about pest or disease detections in the United States that may result in shipments being detained, rejected, or destroyed. APHIS attachés intercede to clarify, assist, and negotiate the release of these shipments.

For example, in the third quarter of FY 2007, APHIS attachés successfully obtained the release of 89 individual shipments, worth over \$4.5 million. This included shipments of bovine hides worth \$360,000 and whey worth \$506,000 to China; potatoes to Japan worth \$678,000; cherries worth \$233,000 and soybeans worth \$529,000 to Taiwan; and butter worth \$300,000 to Belgium.

#### International Standards

APHIS is an active participant in international standard setting organizations such as the International Plant Protection Convention (IPPC) and the World Organization for Animal Health (OIE). The Agency works with foreign regulatory officials in these organizations to ensure international standards are science-based, fair, and practical. Standard-setting work helps expand markets and facilitates safe agricultural trade by mitigating risks.

In FY 2007, APHIS successfully worked with over 120 countries to develop and adopt five new or updated international phytosanitary (plant health) standards and with over 150 countries at the OIE to adopt 13 new animal health standards. We also obtained a favorable official OIE (international) classification of the U.S. Bovine Spongiform Encephalopathy status, thereby providing a critical basis for negotiating the reopening foreign beef markets.

#### Capacity Building and the Visitor Center

The support/hosting of international visitors and volume of international capacity building requests to APHIS have increased significantly over time. The requested topics vary from biotechnology, regulatory processes and policy, pest risk analysis, epidemiology, wildlife control and surveillance, foreign animal disease, diagnostics, and other aspects of animal and plant health, quarantine, and inspection. In an effort to more effectively and efficiently manage the volume of requests, prioritize and allocate resources to fulfill the requests, and document the requests, APHIS created the International Technical and Regulatory Capacity Building (ITRCB) center in June 2007. APHIS cooperates with other federal agencies to

implement technical assistance activities, including USDA's Foreign Agricultural Service, the U.S. Agency for International Development, the State Department, and the office of the U.S. Trade Representative.

In addition, the APHIS International Visitors Center (IVC) plays a key role in coordinating technical assistance. In FY 2007, the IVC became part of the new ITRCB Center and hosted over 590 individuals from 49 countries throughout the year. This is nearly six times more individuals than last year. The Center arranged a variety of programs for these international visitors, including visits to ports and APHIS diagnostic laboratories, training in risk assessment, and exchanges on biotechnology, fruit fly programs, avian influenza, disease surveillance, and a variety of other topics.

Overseas, APHIS provides capacity building assistance in several ways. These projects are coordinated through the ITRCB. Some examples are:

**Animal Health:** The Agency conducted several veterinary epidemiology workshops in Indonesia related to the HPAI response; three Live Bird Market workshops in Central America; and an additional Live Bird Market workshop at the new OIE sponsored training center for Africa in Bamako, Mali.

**Wildlife:** The Agency conducted activities related to HPAI monitoring in wild birds in Asia, Latin America, and the north Atlantic.

**Plant Health:** The Agency conducted training in individual and regional pest risk analysis, SPS regulatory assessments, detector dog programs, pest free area assessments, and DNA extraction, among other areas.

**Biotechnology:** The Agency conducted training on genetically modified organisms and risk assessment for genetically modified foods and provided outreach and on-site training to South African ministerial officials.

#### 8. Tropical Bont Tick

Tropical Bont Tick (TBT) and its associated diseases, heartwater and dermatophilosis, limit the potential for increased livestock production. APHIS has been involved in the cooperative program for TBT known as the Caribbean Amblyomma Program (CAP) since 1994. The goal of the CAP was to eradicate TBT from the Caribbean Islands of Anguilla, Antigua, Barbados, Dominica, Montserrat, Saint Kitts and Nevis, Saint Lucia, and Saint Maarten. The European Union (EU), Inter-American Institute for Cooperation on Agriculture (IICA), and the Food and Agricultural Organization (FAO) were external donors and participated in the program. However, recent data suggests that eradicating TBT from the Caribbean is not a practical goal, and several cooperators have withdrawn from the program. The CAP continues to carry out TBT efforts in the Caribbean through its partnerships with APHIS and the island nation governments but the strategy has shifted from eradication to monitoring

The CAP formulated new proposals and strategies in 2006 and in the summer of 2007, working with international collaborators, APHIS designed a new program that emphasizes forming local expertise; emergency planning and response; and the surveillance of the Amblyomma tick and the cattle diseases it vectors. APHIS worked with IICA in all eight focus islands in the Caribbean to begin forming the surveillance group of epidemiologists and acquiring the necessary infrastructure. The CAP islands continued surveys for TBT, and five islands reported TBT cases. From approximately 1,000 premises examined in the CAP islands, 17 were positive for TBT with 30 ticks found, underscoring the need for continued efforts to prevent the tick from reaching the United States.

### PLANT AND ANIMAL HEALTH MONITORING

Current Activities: The program activities under this component minimize agricultural production losses and export market disruptions by quickly detecting and responding to new invasive agricultural pests and diseases or other emerging agricultural health situations. The Agency updates and maintains endemic pest and disease information bases and monitors and conducts surveys in cooperation with States and industry. Early detection reduces the spread of exotic pests and diseases, helps eliminate significant losses, and helps maintain pest-free status for export certification of agricultural commodities. U.S. agriculture is currently free from hundreds of foreign pests and diseases. APHIS will continue to enhance and expand monitoring and surveillance activities, including the identification of potential pathways for animal disease transmission and increasing the number and intensity of plant pest surveys throughout the United States.

Regulatory enforcement activities prevent the spread of communicable animal pests and diseases in interstate trade. These activities include inspection, surveillance, animal identification, and prosecution. The investigative arm of APHIS strives to achieve voluntary or enforced compliance of our regulations and significantly reduces the likelihood of a foreign disease or pest introduction and the associated costs of an eradication program. The Agency also investigates alleged violations of Federal animal welfare and horse protection laws and regulations. The Agency oversees and coordinates subsequent prosecution of violators through appropriate civil or criminal procedures.

The Agency maintains a cadre of trained professionals, prepared to respond immediately to potential animal and plant health emergencies. Program personnel investigate reports of suspected exotic pests and diseases and take emergency action if necessary. To facilitate these efforts, the Agency develops pathway studies and thoroughly investigates the progression of outbreaks to determine the origin of plant and animal pests and diseases.

#### Selected Examples of Recent Progress:

##### 1. Animal Health and Monitoring and Surveillance

The Animal Health Monitoring and Surveillance (AHMS) program incorporates animal identification, data collection, and evaluation from livestock and animal handling/movement areas through partnerships with State animal health agencies, other governmental agencies, universities, Tribes, and related livestock industries. The program provides rapid traceback capabilities for foreign animal disease incursions, emerging disease outbreaks, and major animal diseases within the country. The program incorporates new technologies to bolster efforts and provide for more rapid detection, analysis, and reporting of foreign and domestic diseases, including significant zoonotic diseases.

APHIS continued to enhance animal disease surveillance and delivery of epidemiologic services. Some examples of the monitoring and surveillance provided include the following.

To prevent Foreign Animal Disease (FAD) incursions, APHIS thoroughly investigated all suspicious situations. Many suspected cases were investigated and subsequently diagnosed as not being an FAD. APHIS conducted 390 investigations of suspect FAD in FY 2007. The decrease in the number of investigations compared to FY 2006 is due to the fact that no FADs were detected which required additional emergency surveillance activities.

#### National Animal Health Surveillance System (NAHSS)

APHIS is continually working to improve its surveillance system by developing national surveillance plans. In FY 2007, APHIS continued implementation of its Classical Swine Fever (CSF) plan as part of the Swine Health Surveillance Plan. Implementation activities included completion of a Memorandum of Understanding with the Food Safety Inspection Service (FSIS) allowing the collection of tissues from condemned carcasses at slaughter for CSF testing. Enhancements were also made to the CSF database that allows submitters and approved National Animal Health Laboratory Network (NAHLN) testing laboratories to submit samples on-line.

During the fiscal year, the NAHSS detected pseudorabies infection in two Arkansas herds, seven Texas herds, two Wisconsin herds and one herd each in California, Georgia and South Carolina. Swine brucellosis was also detected in five Texas herds, five South Carolina herds, one Arkansas herd, and one Florida herd. All herds were identified as transitional (direct or indirect feral swine contact) and depopulated without area spread.

The Swine Health Protection Act allows APHIS to license facilities that feed cooked garbage to swine and to conduct searches for unlicensed facilities feeding raw garbage, a primary risk factor for numerous infectious diseases of swine. In FY 2007 under provisions of the Swine Health Protection Act, APHIS conducted 10,163 inspections of licensed premises and found 136 alleged violations. Of these, 86 were corrected without enforcement action. Searches made for non-licensed facilities totaled 35,450.

#### *Bovine Spongiform Encephalopathy*

In FY 2007, APHIS continued to implement its ongoing BSE surveillance program by testing 42,935 cattle that were 30-months of age or older for BSE. This achieved the program goal to test approximately 40,000 cattle, 30-months of age or older, annually from the following surveillance stream sources: on-farm; veterinary diagnostic laboratories; public health laboratories; FSIS and State-inspected slaughter facilities; and rendering or 3D/4D facilities. To maximize efficiency and effectiveness, the ongoing BSE surveillance program was designed to target those cattle populations where BSE is most likely to be found. Cattle that are identified as “clinical suspects”, whether categorized as such by sample collectors or post-sampling on the basis of the clinical history associated with the animal sampled, are considered to be of the highest value for ongoing surveillance.

#### *National Animal Identification System (NAIS)*

Premises registration, the foundation of NAIS, is critical to rapidly detecting and evaluating the scope of animal disease outbreaks, controlling emergency program budgets, and improving emergency response efficiency. In FY 2007, premises registration continued to be USDA’s priority. At the end of FY 2007, all 50 states, 2 U.S. Territories, and 12 Tribal Nations were participating in the national premises identification registration system, which the Agency supported by providing cooperative agreement funding to States and Tribes. During the year, USDA reached its goal of having 25 percent of the national premises registered. The States and Tribes themselves administered the premises registration process. By the end of FY 2007, there were 417,312 registered premises.

To further encourage industry participation in the implementation of the program, USDA began entering into cooperative agreements with industry groups for outreach and education to encourage participation in premises registration. USDA signed five agreements with industry organizations in FY 2007. These organizations plan to register approximately 240,000 new premises throughout the country. USDA will continue cooperative agreements to promote premises registration until available funding has been distributed.

Disease programs (scrapie, chronic wasting disease, tuberculosis) continue to integrate, use and report the distribution of Animal Identification Number (AIN) tags. In FY 2007, USDA authorized three more manufacturers to begin producing AIN devices for general use by producers in the NAIS, bringing the total to five manufacturers producing eight identification devices (7 radio frequency identification eartags and 1 injectable transponder) for official use in the NAIS and disease programs.

The third component of the NAIS, animal tracing, has also advanced through the establishment of 14 State and private Animal Tracking Databases (ATDs) that will maintain animal movement data. With collaboration from State and industry partners, USDA developed the Animal Trace Processing System (ATPS) that will enable authorized State and Federal animal health officials to request information during an animal disease event. State and industry partners also helped USDA develop the technical requirements

for integration of private/State ATDs with USDA's ATPS. USDA published a guidance document with these requirements. The guidance is available on the NAIS Web site <http://animalid.aphis.usda.gov/nais/>. USDA is now progressing with the implementation phase and will establish formal cooperative agreements with the interim ATDs and any other organizations and States whose systems meet those technical specifications.

*National Animal Health Laboratory Network (NAHLN)*

In FY 2007, APHIS continued to increase its capacity to provide: a secure communication, reporting, and alert system; standardized rapid diagnostic techniques; modern equipment and experienced personnel trained in the detection of emergent, foreign, bioterrorist agents through the NAHLN; training, proficiency testing, and quality assurance to ensure that all laboratories met established quality standards; Federal and State facility upgrades to meet biocontainment requirements; and periodic scenario testing of the response network.

In January 2006, USDA developed and implemented phase one of a surveillance plan for CSF in states (and Puerto Rico) with a high risk for introduction of CSF. Currently, 12 State/university NAHLN laboratories test samples and 18 other State/university NAHLN laboratories assist with sample collection and processing. The total number of State/university NAHLN laboratories participating in CSF surveillance testing has increased from 18 in FY 2006 to 33 in 2007.

*National Veterinary Accreditation Program (NVAP)*

Accredited veterinarians are instrumental in increasing USDA's capability to perform competent health certifications and to maintain extensive disease surveillance and monitoring. The voluntary NVAP certifies private veterinary practitioners to work cooperatively with Federal veterinarians and State animal health officials. In FY 2006, a proposed rule was developed and published announcing the structure of the new NVAP. USDA proposed to amend the regulations to establish two accreditation categories in place of the current category, add requirements for supplemental training and renewal of accreditation, and offer accreditation Program Certifications. Under the proposed rule, Category I would authorize veterinarians to perform accredited duties predominantly on companion animals also defined as animals not including food producing animals, equids, aquaculture, or species that carry VS program diseases. Category II veterinarians would be authorized to perform accredited duties on all species. The new two-tiered system will replace the current structure under which an accredited veterinarian is authorized to perform accredited duties on all species. The new system will increase the level of training and skill of accredited veterinarians in animal disease surveillance, prevention and preparedness in the event of an animal health emergency in the United States. In FY 2007, comments were received and responses were developed concerning the proposed rule.

## 2. Animal and Plant Health Regulatory Enforcement

The Investigative and Enforcement Services (IES) staff continues to provide support to all APHIS programs, as well as Customs and Border Protection at the Department of Homeland Security, by conducting investigations of alleged violations of Federal laws and regulations under the Agencies' jurisdiction through appropriate administrative, civil, or criminal procedures. At the same time, the demand for IES services continues to grow and impact upon the human, fiscal, and information technology resources needed to deliver those services.

In FY 2007, APHIS personnel initiated a total of 6,566 investigations, a significant increase over the 5,140 investigations initiated in FY 2006. IES' completed investigations resulted in 801 warnings, 2,708 civil penalty stipulations, 127 Administrative Law Judge decisions, and over \$2.6 million in assessed fines.

APHIS conducted 5,595 investigations involving agricultural quarantine violations (including plant pests and diseases), resulting in 357 warnings, 2,564 civil penalty stipulations, 29 Administrative Law Judge decisions, and over \$1.65 million collected in fines. The Agency conducted widespread market surveillance to intercept prohibited foreign fruits and vegetables illegally smuggled into the United States, as well as prohibited plants and plant materials. APHIS personnel worked with American Airlines to settle a number of garbage violations, with American Airlines paying a \$30,000 civil penalty. In another instance, APHIS also investigated a Florida company involved in the movement of imported fire ant violating the Plant Protection Act by making 77 movements of nursery stock. The company is being sent a settlement for violating the Federal Regulations with a penalty of \$96,000.

APHIS conducted 482 investigations involving animal health programs in FY 2007, resulting in 253 warnings, 70 civil penalty stipulations, 19 Administrative Law Judge decisions, and \$85,000 in assessed fines. In one significant example of APHIS enforcement, the program referred 33 related equine to slaughter cases to the Office of General Counsel (OGC) involving 28 subjects with a combined recommended penalty of \$1,144,700. Another example of APHIS enforcement includes the issuance of 23 stipulations to Three Hills Rodeo, Inc. involving approximately 35 related equine to slaughter cases which amounted to a combined penalty of \$100,425. Three Hills Rodeo, Inc., failed to identify (with APHIS-approved ear tags) two adult mini-Brahman bulls, 10 roping calves, 20 roping steers, and three additional roping calves (that were not listed on the original incomplete certificates of veterinary inspection) during their interstate movement from Iowa to Michigan. In addition, the three roping calves did not have a certificate to accompany them during their interstate move.

APHIS conducted 482 animal care investigations in FY 2007, resulting in 302 formal cases submitted for civil administrative action, 191 letters of warning, and 73 cases with civil penalty stipulations resulting in \$877,000 in assessed fines. High-priority and significant cases included several that involved the sale of dogs and exotic animals by unlicensed dealers, as well as numerous handling violations involving exhibition animals attacking and/or injuring the public. Two examples of cases with significant penalties imposed follow. In the first example, Lorenza Pearson, dba, L&L Exotic Animal Farm, had its license revoked and Lorenza Pearson is permanently disqualified from obtaining a license under the Animal Welfare Act and the regulations because of the movement of 21 monkeys that died during transport. The company was also assessed a \$35,000 fine for their actions. The second example of a case with significant implications is Kitty Kyrklund, dba, Kitty's K-9 Korner was found, during two separate inspections, to be noncompliant with various housing and care requirements for the dogs and puppies the business owned. As a result, a \$13,500 stipulation was issued.

APHIS is working to improve the timeliness and quality of investigations despite a consistent increase in the number and scope of violations. During FY 2007, the program realigned its organizational structures and operations in both headquarters and the field, adding supervisors to reduce employee-to-supervisor ratios, clarifying roles and responsibilities, and streamlining the flow of information. These changes contributed to improved management of both the employees and workload. The program also revised its case report format, addressing long-standing concerns from customer (e.g., APHIS programs) and partner

organizations (e.g., Office of the Inspector General and Office of the General Counsel). The program also attained Internal Organization Standardization 9001 certification for its enforcement operations, greatly improving the efficiency of the processes APHIS controls. These improvements led to a significant decline in the number of days required to investigate and resolve violations in cases settled through APHIS administrative procedures; from 200 days in FY 2006 to 143 days in FY 2007. APHIS also used these process improvements to increase the number of cases closed through APHIS administrative procedures from 3,014 in FY 2006 to 3,636 in FY 2007.

APHIS also began working closely with its customer organizations to streamline the enforcement processes by working to develop criteria for assigning case priority designations for cases pending enforcement action either internally or at the Office of the General Counsel.

Finally, APHIS significantly enhanced its emergency preparedness readiness and capabilities by providing training to its employees; having employees medically screened and fit tested for respirators; acquiring necessary equipment including mobile and portable radios; and participating in numerous emergency-related events and exercises. For example, APHIS provided support in Texas following the recent hurricanes. Program personnel also participated in and supported the APHIS Emergency Management Leadership Council, thereby increasing the program's involvement in the Agency's emergency management input and decision-making.

### 3. Biosurveillance

The Biosurveillance program supports the development of a computer automated communication and information technology system that accomplishes real-time integration and analysis of human, animal, plant and environmental surveillance information. The program also supports data interpretation analyzed in the context of the threat environment. The system will allow sharing of analysis products with Federal, State and local partners at the appropriate level of classification, and it will help guide outbreak and event responses.

In FY 2007 the Program transferred \$1 million to the Food Safety Inspection Service (FFIS). The funding was used to aid in the development of a predictive analytical system, the Food and Agriculture Biosurveillance Information System (FABIS), that will help FFIS and APHIS analyze relevant public, animal and plant health and other data to achieve its mission. Also, APHIS provided funding for incident command training to increase the level of preparedness of our incident management teams. Finally, the Program provided funding to assist the Technical Support Working Group (TSWG), in activities relevant to APHIS operations. The TSWG is the national interagency research and development program for combating terrorism requirements at home and abroad.

### 4. Emergency Management Systems

The Emergency Management Systems program strives to enhance APHIS' animal health emergency preparedness efforts by providing leadership, strategies, and resources for effective and expedient emergency response and continued emergency management.

APHIS coordinated and participated in many working groups to prepare personnel and resources in the event of an animal emergency. These groups included the U.S. Avian Influenza Joint Working Group, the working group for the coordination of zoonotic disease surveillance, the Center for Disease Control's Integrated Agency-Wide coordination group, and, an interagency Agriculture Intelligence workgroup with the Federal Bureau of Investigation and the Food and Drug Administration. The last group is charged with finding the best ways to combine skills, technology, and resources to prevent an attack on our food and agriculture sector.

The Agency continued its emergency management and foreign animal disease training needs assessment. The results from this assessment will provide APHIS the knowledge to focus on the most critical training

needs for its employees. The assessment will also enable APHIS and its partners to become increasingly better prepared to respond to animal health emergencies. The assessment will continue through FY 2008.

APHIS utilizes its Area Emergency Coordinators (AEC) to actively engage State, Tribal, local governments, and industries in advancing their emergency preparedness and response capabilities. All 50 States have demonstrated a systematic approach to evaluating readiness for preparation, prevention, response to, and recovery from terrorism, major disasters, and any other emergencies threatening or affecting their animal agriculture. APHIS continued its recruiting efforts to attract and retain highly qualified veterinarians for the AEC positions. The number of staffed positions increased from 17 in FY 2006 to 25 in FY 2007.

The National Animal Health Emergency Response Corps (NAHERC) serves to rapidly expand the Federal workforce to respond to animal health emergencies. The number of NAHERC members is directly linked to APHIS' ability to provide human resources during a large scale animal health emergency. In FY 2007 its hiring process was realigned to meet existing APHIS hiring practices. Prospective applicants must now apply via USAJobs. In FY 2007, 457 total applications were received. A NAHERC coordinator was hired and started on November 13, 2007. NAHERC brochures were completed and printed, and the website has been updated: [naherc.aphis.usda.gov](http://naherc.aphis.usda.gov). Recruitments are held at animal health conferences and events. A recruitment contractor has attended 17 events to date and is scheduled to attend 22 more events through the end of December 2007.

The National Veterinary Stockpile (NVS) serves as a critical component of the Agency's emergency preparedness and response efforts. The NVS is designed to acquire, configure, and maintain veterinary surge materials to ensure the United States is effectively prepared to address multiple introductions of the most damaging livestock and poultry diseases. APHIS continues to refine its business practices using best practices and lessons learned from the Strategic National Stockpile, which is the human health equivalent to the NVS. During FY 2007 the Agency expanded the NVS. The expansion was funded from the Avian Influenza line item, while NVS oversight was provided by Emergency Management Systems. NVS now has the capability to: protect 310 responders for 10 days in a high risk environment, protect up to 1,500 responders for 40 days, and, procure antivirals to support 3,000 responders for six weeks. NVS has also entered into contracts with these companies to provide antiviral and protective equipment for indefinite delivery and quantity in the event of a protracted emergency. The NVS established transportation and delivery contracts to ensure the materials can be delivered to an animal health incident location within 24 hours. Additionally, the NVS has tested emergency capabilities for animal depopulation, decontamination, and disposal services in an actual incident. The NVS is currently prepared to respond to avian influenza by holding 140 million doses of avian influenza vaccine, for the protection of poultry, and has guaranteed contracted access to 500 million doses, should the need arise. Finally, NVS held a tabletop exercise and prepared for a series of operation exercises. The tabletop exercise was used to test the deployment capabilities of NVS to deliver materials, supplies, and equipment, as needed in the event of an outbreak or multiple outbreaks.

In addition to NVS exercises, APHIS adapted a previously contracted pandemic exercise for use by the veterinary laboratory network. The exercise was then adapted further and conducted at a conference for the improvement of health and safety of first responders.

During FY 2007 APHIS responded to 15 major foreign animal disease investigations. APHIS also participated in 10 exercises to aid in the enhancement of community planning. These actions provided valuable information that was used to update the response manuals for two major foreign animal diseases. To better meet the needs of its stakeholders, APHIS adjusted its strategy for the production of content for response documents. The Agency also issued a statement of work for the development of the disease response manuals for avian influenza and foot-and-mouth disease. These manuals will be completed in FY 2008 and will serve as the models for future disease manuals. In addition, APHIS updated plans for depopulation strategies and compensation relating to highly pathogenic avian influenza. The plans were

updated to include the use of fire foam in mass depopulations of infected flocks. Also, the plan allows for indemnity payments following the low pathogenic avian influenza rule.

#### 5. High Pathogen Avian Influenza (HPAI)

#### INTERNATIONAL EFFORTS

As a lead technical Agency within the integrated U.S. Government response to HPAI worldwide, USDA is implementing a comprehensive program of activities that are directly aligned to the three pillars of the National Strategy: 1) Preparedness and Communication; 2) Surveillance and Detection; and 3) Response and Containment. USDA's major activities under each of the strategic pillars are summarized below.

##### *Preparedness and Communication*

APHIS continues to assist partner countries to effectively manage and communicate avian influenza risk within the context of internationally accepted guidelines and recommendations for risk analysis. In addition, APHIS assists public and private stakeholders to communicate accurate information to consumers about avian influenza risks within the pillar of Preparedness and Communication.

APHIS collaborated with the international animal health standard setting body, OIE, to implement the Performance, Vision, and Strategy (PVS) tool in high focus countries. The PVS tool identifies gaps between international standards and the quality level of the veterinary service in countries. To assist with the improvement of this ability, APHIS delivered short-term technical advisers to partner countries to assist with establishing an incident command structure, and with animal health aspects of their national HPAI response plans. APHIS also conducted workshops and provided short-term technical advisers on biosecurity standards at live bird markets abroad. APHIS has undertaken collaborative research on animal vaccines and has disseminated information on vaccines and their potential applications to reduce HPAI with partner countries.

APHIS has established offices and personnel in China, Laos, Cambodia, Thailand, and Indonesia. These offices are dedicated exclusively to HPAI activities and, wherever possible the offices have been co-located with Center of Disease Control offices. APHIS facilitated a series of regional courses on HPAI epidemiology and conducted an Asia Pacific Economic Cooperation seminar on options to design and implement farmer compensation programs and risk communication campaigns to support animal disease prevention, detection, and eradication efforts. APHIS sent materials such as personal protective equipment (PPE), and special packing boxes to all its overseas offices to safely collect and transport suspect HPAI samples to labs for diagnosis. Additionally, APHIS provided diagnostic equipment and reagents to six nations.

##### *Surveillance and Detection*

APHIS cooperates with partner countries' animal health officials to strengthen their capacities for surveillance techniques, specimen collection and handling practices, and performance of internationally accepted diagnostic techniques to accurately confirm or refute suspected cases of avian influenza in a timely manner.

APHIS is supporting efforts to improve laboratory diagnosis and early-warning networks in more than 40 countries, and the Agency is working with its partners to expand on-the-ground surveillance capacity and improve knowledge about the movement and changes in H5N1 on a global scale. APHIS provided funding to the World Health Organization (WHO) to strengthen its Global Outbreak and Response Network to support surveillance and response in nations worldwide. The Global Avian Influenza Network for Surveillance project objective is to share information, increase the availability of scientific information for detection and containment, and track changes in virus isolates.

### Response and Containment

APHIS seeks to improve priority countries' capacity to take coordinated effective action to prevent HPAI incursions and, where outbreaks occur, contain HPAI at its site of origin or limit its spread.

APHIS' international effort to contain and mitigate the effects of an outbreak of pandemic influenza beyond our borders is a central component of the Agency strategy. APHIS has developed protocols and trained personnel to support an international effort to contain the pandemic in its earliest stage; including the deployment of medical countermeasures such as antiviral medications. APHIS procured and pre-positioned overseas stockpiles of PPE, decontamination kits, and antiviral medications, to complement global efforts to contain pandemic outbreaks. For example, APHIS has pre-positioned a stockpile of antiviral medications in Asia that is available to the international community for pandemic response. Today, our Federal, State, Veterans Affairs, and Department of Defense stockpiles contain enough antiviral medications to treat 50 million people.

In addition, APHIS has achieved significant accomplishments and results regarding a variety of HPAI issues in wild, migratory birds. Additional surveillance agreements in Russia and Greenland have helped trace virus movements and provide a more robust early detection system. The Russian, Danish, and Canadian projects truly protect against the virus being moved around the North Pole. These surveillance efforts coupled with surveillance in China have moved APHIS to the forefront of international wildlife disease management.

APHIS' international activity objective is to build the capacity with affected countries to affectively manage efforts in control and containment of this disease. International activities associated with AI have been implemented, because, by combating and containing the virus among the infected birds, APHIS is reducing the opportunities for the virus to spread further and possibly mutate with a pandemic potential. These actions also reduce the risk of HPAI entering the U.S. Although APHIS is making every effort to minimize the ability of HPAI to spread domestically, the Agency has been preparing for such an event.

### DOMESTIC EFFORTS

APHIS has taken action to prevent the accidental or intentional introduction of HPAI into the United States and ensure preparedness in the event of an outbreak of the disease. APHIS' combined efforts are organized into four functional areas similar to the National Strategy for Pandemic Influenza. One functional area includes international capacity building activities described previously. APHIS' major domestic activities under the remaining three functional areas include: expansion of previous surveillance of commercial establishments, live bird markets, and inclusion of upland game birds under domestic bird surveillance and diagnostics; surveillance of wild bird populations that had previously not been monitored within wildlife surveillance and diagnostics; and outreach and education, as well as accumulation of supplies for dealing with possible avian outbreaks under the functional area of emergency preparedness and communication.

#### Domestic Bird Surveillance and Diagnostics

There are four domestic areas of concentration in surveillance: live bird marketing system, upland game, commercial surveillance outside of the live bird marketing system, and, assistance to the broiler industry for expansion of AI surveillance in commercial operations through the National Poultry Improvement Plan (NPIP). APHIS entered into cooperative agreements with the States previously enrolled in the NPIP and Live Bird Marketing System (LBMS). APHIS increased the overall number of States with LBMS agreements by 10, NPIP agreements by 19, and upland bird agreements by 37. These led to totals of 39 HPAI LBMS agreements, 44 HPAI NPIP agreements, and 37 HPAI upland game bird agreements.

APHIS continued to use education and outreach campaigns to increase the awareness of HPAI. The Agency's efforts focused on three critical areas: *Biosecurity for the Birds*, Smuggling Interdiction and

Trade (SITC), and wild bird surveillance. The *Biosecurity for the Birds* program has allowed APHIS to reach the smaller segments of the avian marketplace including backyard poultry producers, and pet bird owners to educate a wide variety of people on HPAI and practices to reduce the threat of an avian influenza introduction. The campaign is also designed to reach minority and underserved communities such as Hispanic, Vietnamese, Filipino, Native American, and Amish.

The SITC campaign was initiated in order to provide the general public with more information regarding illegal importation of products or smuggled products and the introduction of foreign agricultural diseases such as HPAI into the United States. The campaign included a toll free number for the anonymous reporting of suspected illegal products and activities. As a result of the campaign, the number of calls to the hotline has increased significantly.

The wild bird surveillance campaign targets hunters and bird enthusiasts to encourage them to report sick birds. APHIS has used advertising in popular hunter magazines and bird enthusiast publications, and public service announcements. The outreach effort has expanded the Agency's surveillance through passive efforts of backyard poultry producers, pet owners, bird enthusiasts, and hunters.

APHIS' National Veterinary Services Laboratories (NVSL) continues to provide support to approved laboratories that process samples submitted from the HPAI surveillance program. To meet the demand for reagent production to support the laboratories, NVSL has developed and contracted out the production of the AI Agar Gel Immuno Diffusion (AGID) test reagents that are used to test for the presence of AI in a bird sample. NVSL established a contract to supply APHIS with 10,000 sets of AI AGID reagents. The contract provides for one-half of the increased reagent demand. APHIS' production of this reagent will provide for the remaining reagent demand. APHIS has also purchased supplies and equipment necessary for the increased on-site reagent production.

## 6. Pest Detection

The Pest Detection program seeks to maintain APHIS' emergency preparedness through the early detection of invasive pests. By discovering newly introduced pests before they have a chance to spread, the pest detection program seeks to prevent small outbreaks from becoming full blown emergencies. APHIS and its State cooperators carry out surveys for pests of regulatory significance through the Cooperative Agricultural Pest Survey (CAPS) program. The mission of the CAPS program is to provide a distribution profile of plant pests in the United States deemed to be of regulatory significance to APHIS, State Departments of Agriculture, tribal governments, and cooperators by confirming the presence or absence of plant pests impacting the domestic and international movement of plants and plant products, and establishing and maintaining a comprehensive network of cooperators and stakeholders to facilitate our mission and to safeguard our American plant resources.

APHIS and its state cooperators carry out surveys for high-risk pests through the Cooperative Agricultural Pests Survey (CAPS) network. For FY 2007, the program and its cooperators targeted 12 high-risk pests for survey, prioritized by the National CAPS Committee, and 27 other exotic pests with the potential to cause significant economic or environmental damage. The program was able to increase its survey capacity and exceeded its performance measure target for the number of exotic pests surveyed. In addition, the cost of each individual survey was \$1,200 below what was anticipated in the previous year. All together, 718 individual surveys were carried out across the country. The CAPS program detected two pests (*Sirex* woodwasp and lobate lac scale) and one pathogen (citrus greening) during directed surveys in areas where they were previously not known to occur in FY 2007. There were no detections of the remaining 26 pests and pathogens. The program detected 88 percent of known significant introductions of plant pests or diseases before they spread from the area of original colonization and cause significant economic or environmental damage.

A total of 34 other pests and pathogens were detected outside of U.S. ports and identified as new or re-introduced to the United States. Seventeen of these were significant and listed as reportable and actionable.

Examples include rice panicle mite, ficus whitefly, and orange rust of sugarcane. These were detected by program surveys, industry, and university extension, and reported to APHIS. The Pest Detection program works with both USDA's National Plant Diagnostic Network (NPDN), and a nationwide network of extension agents to raise awareness of exotic pests among their employees and ensure they know to contact APHIS in the event of exotic pest detection. NPDN scientists and extension agents may be the first ones alerted if a citizen, or a State department of agriculture official, finds an out-of-the-ordinary pest.

The program is continuing to develop commodity and resource-based surveys to monitor for the presence of a group of pests that threaten a specific commodity or resource. These surveys will allow us to target high-risk hosts and commodities, gather data about a larger number of pests specific to a high-risk commodity, and establish better baseline data about pests that have recently been introduced in the United States. In 2007, the program developed reference manuals and survey guidelines for commodity surveys for soybeans and oak trees in addition to the citrus commodity and exotic wood borer and bark beetle survey manuals published earlier.

## 7. Select Agents

The goal of the select agent program is to implement and oversee compliance with the Public Health Security and Bioterrorism Preparedness and Response Act of 2002. This act enables APHIS to regulate agents or toxins deemed a threat to animals, plants, or animal/plant products (known as select agents and toxins). Compliance with select agent regulations helps to fulfill the objective to protect the U.S. from the occurrence of adverse animal or plant health events; provide regulatory oversight for the import and interstate movement of select agents and toxins; and register those facilities that possess, use, and transfer select agents and toxins.

The Public Health Security and Bioterrorism Preparedness and Response Act of 2002 requires entities that possess, use, or transfer select agents and toxins to register with the appropriate Federal authority. The regulations under this act require individuals or entities possessing, using, or transferring select agents or toxins to register with either the Centers for Disease Control and Prevention (CDC) or APHIS. By identifying and registering facilities that possess, use, or transfer select agents or toxins, APHIS is able to monitor and track their movement.

The Agriculture Select Agent and Toxin program received five new applications in FY 2007. Even with this increase in workload the Select Agent and Toxin program was still able to meet its performance target of 7 days spent on application review. Additionally, it provided 1,052 reviews/responses/renewals (includes 148 security review actions) to USDA's and CDC's Select Agent Program (CDC SAP) regarding registrations, amendments, and renewals that are (or will be) possessed, used, or transferred by entities that will be or are registered with APHIS and the CDC.

The Agriculture Select Agent Program has re-inspected 90 percent of the currently registered Biosafety Level (BSL)-2 and BSL-3 entity laboratories for biosafety and biocontainment compliance. APHIS will have completed 100 percent of the inspections by the end of December 2007. APHIS Veterinary Services Select Agent Program conducted two web-cast laboratory security training courses for APHIS select agent inspectors. APHIS Veterinary Services Select Agent Program and the CDC posted the Select Agent and Toxin Security Information Document and the Select Agent and Toxin Security Plan Template, in addition to a four-part Security Inspection Checklist, on the National Select Agent Registry web-site. These documents are designed to assist entities in developing effective written security plans. These inspections, training courses, and plans contributed to the program meeting its performance measure target of zero select agent incidents.

APHIS personnel participated in a Select Agent Inspector Training Course in August. The training was held at the National Veterinary Services Laboratories in Ames, Iowa, and included a tour of the new laboratory facilities. These inspectors conduct the inspections that are necessary for the registration of a laboratory to possess, use, and transfer select agents. The Select Agent Program and the CDC released an

informational DVD related to the inspection of BSL-3 select agent laboratories and select agent toxin laboratories. Also, APHIS and the CDC are currently developing a Select Agent and Toxin Incident Response Information Document to assist entities in developing effective written incident response plans.

APHIS and the CDC continue to work on the development of the National Select Agent Registry (NSAR). This is a single, Web-enabled system that will allow stakeholders to interact with both agencies and that will facilitate maximum interagency collaboration and program management efficiency. A Memorandum of Understanding (MOU) on the management of the NSAR and an agreement regarding an interagency change control board were developed during FY 2006. This MOU remained in effect during during FY 2007.

## PEST AND DISEASE MANAGEMENT PROGRAMS

Current Activities: The programs within this component minimize risks to agricultural production, natural resources, and human health and safety by effectively managing agricultural pests and diseases, and wildlife damage in the United States. APHIS cooperates with States and industry to protect American agriculture by eradicating harmful pests and diseases or, where eradication is not feasible, by minimizing their economic impact. The Agency monitors endemic pests and diseases through surveys to detect their location and through inspection to prevent their spread into non-infested parts of the country.

APHIS coordinates several programs that control or eradicate plant pests and diseases. Eradication programs include Asian longhorned beetle, boll weevil, and witchweed. In addition, the Agency conducts risk-based management activities to prevent the spread of pests such as the glassy-winged sharpshooter, golden nematode, and gypsy moth. In both eradication and control programs, APHIS develops and enforces quarantines to restrict the movement of hazardous pests and diseases. The Agency conducts a biological control program, using natural enemies of pests, diseases, or weeds to provide cost-effective, environmentally friendly pest control for use in our programs. APHIS also conducts animal disease control and eradication programs involving testing, quarantine, treatment, and depopulation of infected animals. Examples include brucellosis, low pathogen avian influenza, and tuberculosis. APHIS' Emergency Management Systems provides plan development for foreign animal disease response, coordination of animal disease outbreaks, and maintains a national corps of emergency responders of animal disease events. The Wildlife Services program protects American agriculture from predators through identification, demonstration, and application of wildlife control measures.

### Selected Examples of Recent Progress:

#### 1. Aquaculture

APHIS' aquaculture program strives to protect domestic aquaculture production, which is worth annually over \$1 billion in the United States. We conduct activities in wildlife populations to prevent predation of domestic production or directly with the domestic producer to prevent pests or diseases.

#### Wildlife Management

Some of the Agency's activities include: recommending and/or providing wildlife exclusion or scaring devices; conducting surveys of fish-eating birds to determine population distribution and movements; conducting wildlife food-habits studies; working onsite with producers to set up integrated control programs to reduce fish losses from birds and other wildlife; and working with the Department of the Interior's (DOI) Fish and Wildlife Service (FWS) and State wildlife agencies to jointly develop bird damage-management plans to protect aquaculture products while ensuring the continued viability of bird populations.

In FY 2007, APHIS provided wildlife damage management assistance to aquaculture producers in 14 States. This included assistance to anglers, baitfish and crawfish producers, catfish farmers, fish hatcheries, sport fish producers for pond stocking, and tropical fish producers. The Agency also managed wildlife predation to aquaculture facility levees and dikes from beaver, nutria, muskrat, and river otter.

One of APHIS' major aquaculture activities is preventing cormorant damage to the catfish industry. This industry is valued at more than \$600 million per year in the United States, with nearly 65 percent of catfish production occurring in Mississippi. The Agency's National Wildlife Research Center showed that the impact of the double-crested cormorant to the industry was between \$9.8 and \$13 million. To further prevent damage in FY 2007, the Agency dispersed 181,186 cormorants and moved 54 cormorant roosts from nearby aquaculture facilities. The Agency provided training and technical assistance to catfish producers in Mississippi, the largest catfish-producing State, which enabled them to disperse another 157,904 cormorants and move 39 roosts to protect their catfish production areas. By transferring these

skills to producers, APHIS increased the movement of cormorant roosts from nearby catfish farms by 22 percent and dispersed 10 percent more cormorants compared to the prior year.

### Aquaculture Health

APHIS monitored for Infectious Salmon Anemia (ISA) by instituting mandatory surveillance at all Maine salmon sites after officials found ISA in 2001. Agency officials have reported no ISA positive cases since March 2006. The surveillance conducted through the ISA program allows for early detection and removal of infected cages, resulting in decreased infection pressure on adjacent cages and neighboring salmon farms. APHIS continues to cooperate with State, industry, and Canada on depopulation, cleaning, and disinfection; epidemiology and surveillance; and biosecurity, audits, and inspections.

APHIS continued its fight against Viral Hemorrhagic Septicemia (VHS), which causes mass mortalities and has affected numerous wild species not previously known to be susceptible to VHS especially in the Great Lakes region. Of greatest concern is that this strain can infect economically important farm-raised fish such as catfish, the most valuable aquaculture species in the United States. APHIS implemented cooperative agreements with State agencies to conduct surveillance on wild populations in the eight States bordering the Great Lakes, as well as 11 other States bordering those States (Connecticut, Iowa, Kentucky, Maryland, Massachusetts, Missouri, New Jersey, North Dakota, South Dakota, West Virginia, and Vermont). The Agency also developed an education and outreach campaign focused on aquaculture facility biosecurity issues and vectors of disease transmission not easily controlled by regulatory activities. Additionally, APHIS built the infrastructure at the National Veterinary Services Laboratories in Ames, Iowa, to be able to conduct confirmatory testing and other activities related to the aquaculture program.

During FY 2007, APHIS continued work on the National Aquatic Animal Health Plan (NAAHP) to protect U.S. wild and cultured aquatic animal resources from foreign pathogens, support effective aquaculture, achieve efficient and predictable commerce, and meet national and international trade obligations. The task force consists of representatives from APHIS, the DOI's FWS, and the Department of Commerce's National Oceanic and Atmospheric Administration's National Marine Fisheries Service. We are in the final stages of drafting the NAAHP to create a framework for aquatic health issues

## 2. Biological Control

APHIS uses biological control organisms to safeguard America's agricultural production and natural ecosystems from economic losses caused by insects, other arthropods, nematodes, weeds, and diseases of regulatory significance, while minimizing adverse environmental impacts. Biological control is a key component of integrated pest management strategies that utilizes living organisms, such as natural enemies and competitors, to effectively mitigate the impacts of exotic, invasive insect pests, weeds, and plant pathogens, while minimizing the impacts that control tactics for these pests may have on the environment and non-target organisms. Biological control agents survive and reproduce in ecosystems and become self-sustaining; little or no additional cost is involved after successful agent introductions. APHIS uses biological control to target species for which other control methods (such as chemical or cultural control) are impractical.

In 2007, the Biological Control program continued projects addressing 47 invasive insect pests and weeds, including field implementation programs releasing biological control agents. The program also includes foreign exploration to identify natural enemies and conducts pre-release tests for new biological control targets. Once APHIS program officials develop successful rearing and release techniques for a particular biological control agent, the program's goal is to transfer the technology to cooperators for ongoing management of the targeted weed or insect. This allows the program to concentrate its efforts on new target species. The following are three examples of biological control projects:

Biological Control of Emerald Ash Borer: Scientists from APHIS and USDA's Forest service have identified 3 biological control agents that target the emerald ash borer (EAB), which has

caused extensive damage in several Midwestern states. The Plant Methods program evaluated these exotic parasitoids in quarantine for potential non-target effects and determined that their release would not have significant negative impacts. Following a public review of the environmental assessment, and concurrence from State of Michigan officials and Native American groups, the program made initial small-scale releases in Michigan during August and September 2007. Field evaluations will be made in the spring of 2008 to determine if the parasitoids were able to establish, and additional larger-scale releases are being planned, although any potential impact of the parasitoids on EAB populations will not be known for 3-5 years.

**Biological Control of the Pink Hibiscus Mealybug (PHM):** This exotic insect destroys a large range of commodity crops across Florida and Hawaii. The program continued to support mass-rearing efforts of the PHM parasitoids *Gyranoidea indica* and *Anagyrus kamali* in Puerto Rico and Florida. The program is currently releasing the parasitoids in Florida, Louisiana, and Texas to combat new infestations and coincide with survey efforts for the pest as the infestation spreads. APHIS released approximately 521,000 parasitoids of each species across Florida, Louisiana, and Texas.

**Biological Control of Tropical Soda Apple:** The program continued to rear and release tropical soda apple leaf feeding beetles, *Gratiana boliviana*, throughout Florida. Field evaluations conducted by APHIS in 2007 suggest the beetle is starting to provide some control of this noxious weed, which degrades land used for pasture. The program revisited field release sites in Alabama and Georgia, and the beetles were found to have persisted through two winters. APHIS also initiated releases of the leaf-feeding beetles in Texas, and the program continues to monitor their impact.

### 3. Boll Weevil

In FY 2007, APHIS provided nearly 29 percent cost-share to various grower organizations to support the cooperative Boll Weevil Eradication Program. This program continues to make impressive progress, combining extensive trapping with the prudent use of pesticides to treat only infested cotton fields. Cotton producers are enjoying lower production costs, increased yields, and less dependence on chemical pesticides. In 2007, as a result of program operations, Oklahoma became weevil-free and moved into its post-eradication phase. Mississippi is nearly weevil-free and should complete its active phase in 2008. The overall eradication effort also made significant progress in Arkansas, Mississippi, Missouri, Tennessee, and Texas. In these States, an additional 1 million acres became weevil-free in 2007. APHIS expects that all remaining infestations will be eliminated by 2010. Since the Farm Services Agency's (FSA) Boll Weevil Eradication loan program began in 1997, the FSA has loaned approximately \$780 million to grower organizations involved in weevil eradication. By the end of FY 2007, over \$595 million had been repaid, either on time or ahead of schedule.

At the close of the 2007 season, weevil-free acreage had increased from 87 to 94 percent. Approximately 98 percent of all cotton acreage is expected to be weevil-free by the end of FY 2008, with 99 percent projected for 2009, and complete eradication expected by the end of FY 2010. Nationwide, the boll weevil has been eradicated from over 15 million of the 16 million acres of cotton produced.

### 4. Brucellosis

Brucellosis is an infectious and contagious bacterial disease of animals and humans caused by organisms of the genus *Brucella*. Although brucellosis can infect other animals, the main threat of disease is to our domestic cattle, bison, and swine herds. Humans, infected incidentally by contact with infected animal tissues or ingestion of dairy foods made from unpasteurized milk from infected animals, may develop a severe intermittent fever, general malaise, and muscle pain.

In FY 2007, 49 States and three Territories were classified at Brucellosis Class Free state status, and one state remained classified at Brucellosis Class A state status. The State of Idaho, which lost its brucellosis Class Free state status pursuant to the disclosure of two brucellosis affected cattle herds in November 2005, regained Brucellosis Class Free state status on July 23, 2007. Texas formally submitted application to advance to Class Free State status in June, 2007. A pre-Class Free review conducted in Texas during the week of July 29 to August 4, 2007 evaluated the Texas brucellosis program to confirm that all requirements to advance to Class Free State status have been met. All states except Texas remain classified as Stage III (Free) for swine brucellosis; Texas remains classified at Stage II.

One new brucellosis affected cattle herd was disclosed in FY 2007. This single brucellosis affected cattle herd was disclosed in the state of Montana in mid-May 2007 pursuant to a test of animals intended for interstate movement. The herd of origin was depopulated and a thorough affected herd epidemiology investigation, complete with all contact herd testing, was completed within the sixty-day time period allowable for a Class Free state to maintain status. No additional brucellosis affected herds were identified.

The national herd prevalence rate for bovine brucellosis was 0.0001% in FY 2007. Feral swine infected with brucellosis continue to pose a significant risk to transitional swine herds in several states. Nine brucellosis affected swine herds were depopulated in FY 2007. These stringent and vigilant Brucellosis program activities allow the country to maintain program integrity and validate the disease free status for our domestic cattle and swine herds.

Maintaining Brucellosis state status focuses on continual surveillance activities. Two primary surveillance activities are conducted for bovine brucellosis: Market Cattle Identification (MCI) testing; and Brucellosis Milk Surveillance Testing (BMST). During FY 2007, APHIS tested approximately 7.995 million head of cattle under the MCI surveillance program. BMST surveillance is conducted in all commercial dairies – a minimum of two times per year in Class Free states and a minimum of four times per year in Class A States. Approximately 142,700 BMSTs were conducted in FY 2007; approximately 126 of those BMSTs yielded suspicious results after repeat screening. All suspicious BMSTs were confirmed negative for Brucellosis. There were approximately also 4.212 million calves vaccinated for brucellosis in FY 2007.

There were also two main swine surveillance activities directed at validating state's swine brucellosis status. These activities include Market Swine Testing (MST) and herd validation (required of all commercial herds in some states). There were approximately 539,900 swine tested in the MST surveillance program in FY 2007. Approximately 153,400 additional swine were tested on farm, mainly for movement, herd validation, and exhibition purposes.

APHIS continues to recognize the importance of cooperating with the Federal and State agencies in management of the wild bison and elk in the Greater Yellowstone Area (GYA). The Secretaries of the U.S. Department of Agriculture and the U.S. Department of the Interior (DOI) agreed on a new Greater Yellowstone Interagency Brucellosis Committee Memorandum of Understanding (MOU). The updated MOU has been resubmitted and is currently under review for concurrence by GYA Governors.

In FY 2007, APHIS continued its involvement in several on-going developmental projects such as the bison quarantine feasibility study, brucellosis transmission studies in bison and elk, and immunocontraceptive studies. Working closely with DOI's National Park Service (NPS), APHIS has been able to maintain a viable bison population and prevent transmission of brucellosis to domestic livestock. APHIS personnel assisted with Interagency Bison Management Plan (IBMP) management operations. In FY 2007, 37 hazing operations of 3,916 bison were performed. Capture operations resulted in the capture of 59 bison.

APHIS is also working closely with the GYA states (Idaho, Montana, and Wyoming) to assist them in maintaining their Brucellosis Class Free classification. GYA states are proceeding, within consultation with APHIS, development and implementation of individual livestock herd and individual elk herd unit plans to mitigate potential transmission of brucellosis from elk or bison to cattle.

The Final Bison and Elk Management Plan and Environmental Impact Statement for the National Elk Refuge and Grand Teton National Park was completed and a Record of Decision was issued. APHIS was a cooperating agency in this effort. The elk herd will be reduced to approximately 5,000 head and the bison herd will be reduced to approximately 500 head during the implementation of the plan.

##### 5. Chronic Wasting Disease (CWD)

Chronic Wasting Disease (CWD) was detected in a farmed elk herd in South Dakota in 1997. There is no effective treatment for CWD. APHIS works closely with the States, Tribes, other Federal agencies, and industry stakeholders to maintain a coordinated approach to control and eradication efforts for CWD. State and Federal agriculture agencies are responsible for safeguarding the health of domestic livestock. State and Federal Wildlife Management agencies are responsible for the management of free-ranging cervids. When native wildlife species such as deer and elk are farmed, the jurisdictional lines become more complex. Regulatory authority for captive cervids may lie with the State agriculture agency, the State game or wildlife agency, or both depending on the State. In preparation for implementation of the national CWD program, many States have established CWD surveillance and/or herd certification programs and import requirements for captive cervids.

APHIS works to control CWD in wildlife in cooperation with the respective State and Tribal wildlife agencies. These efforts reduce the risks of disease transmission from free-ranging wildlife to animal agriculture and vice versa. In FY 2007, APHIS once again provided \$5 million for State wildlife agencies and \$750,000 for Tribes in cooperative agreement funding for CWD activities. Forty-eight States, 23 tribes and the Native American Fish and Wildlife Society applied and were approved for this cooperative agreement assistance. CWD has been detected in wild deer, elk and/or moose in eleven states: Colorado, Illinois, Kansas, Nebraska, New Mexico, New York, South Dakota, Utah, West Virginia, Wisconsin and Wyoming. At the beginning of FY 2007, only Colorado and Wisconsin were known to have any CWD positive captive herds.

National Wetlands Research Center (NWRC) scientists at the Fort Collins, Colorado, headquarters continued to develop and refine a Chronic Wasting Disease (CWD) vaccine. An experimental vaccine trial in the widely used Rocky Mountain Laboratory mouse model system yielded two promising vaccine candidates. The Agency will use the two CWD vaccine candidates to vaccinate mule deer; making this the first known application of a CWD vaccine in the target species. Preliminary results show the mule deer are producing antibodies in response to the vaccine. The deer are already over 120 days post-disease challenged in an environment that simulates the natural CWD transmission routes. NWRC will not have conclusive results of how well the CWD vaccine works in mule deer for up to 2 years.

APHIS continues to assist States with CWD surveillance and management in wild cervid populations. In 2006-2007, the last season for which data are available, more than 100,000 wild cervids were tested for CWD. This testing was largely made possible by APHIS cooperative agreement funding. APHIS continues to consult with the Association of Fish and Wildlife Agencies in setting the formula for this assistance to state wildlife agencies through service or cooperative agreements.

In addition to the National Veterinary Services Laboratory in Ames, Iowa, there are 26 contract laboratories in 21 States certified for CWD diagnostics. These labs provide more than ample capacity for the diagnostic needs of the CWD program. To further advance the effectiveness of surveillance and diagnostics, APHIS continued to evaluate the feasibility, practicality, and usefulness of the rectal biopsy as a live animal test for CWD.

APHIS has developed a Herd Certification Program (HCP) in consultation with States, the farmed cervid industry, and the U.S. Animal Health Association (USAHA) to support this effort. The proposed APHIS HCP rule was published for public comment in December 2003, and the final rule was published on July 21, 2006. Subsequent to publication, three petitions were received from organizations representing State

agencies and officials. The petitions challenged Federal preemption language and certain interstate movement provisions in the final rule and requested a delay in implementation. On September 8, 2006, APHIS published a notice to delay implementation of the rule and on November 3, 2006, published the petitions for public comment. APHIS reviewed these comments and in late June 2007 requested additional information from the States regarding the restrictions on the movement of captive cervids into their States. Based on all information received, APHIS is drafting new proposed rule language to address issues related to the interstate movement requirements. APHIS intends to publish a new proposed rule for comment in FY 2008 and implement a new final rule in FY 2009.

The APHIS HCP will recognize existing State programs that have the necessary authorities and meet or exceed national program standards for surveillance, inventory, identification, and fencing. Once the program is implemented, captive cervid owners can participate in their approved State program or they can participate directly in the national program if no approved State program exists. Interstate movement of animals will be dependent on participation in an approved program.

The CWD program continues to build cooperative partnerships with other Federal agencies, the States and Tribes, and the cervid industry through presentations and discussions at multiple meetings throughout the year. APHIS also continues to work jointly with the Agency's Scrapie program in presenting an annual Transmissible Spongiform Encephalopathy epidemiology course at Ames, Iowa.

#### 6. Emerging Plant Pests (EPP)

In FY 2007, APHIS had the following funds available for the Emerging Plant Pests (EPP) (dollars in thousands):

Asian Longhorned Beetle (ALB)	Citrus Health	Glassy-winged Sharpshooter (GWSS)	<i>Phytophthora Ramorum</i> /Sudden Oak Death	Emerald Ash Borer (EAB)	Karnal Bunt	Other	Total
\$19,904	\$36,455	\$24,130	\$3,062	\$9,952	\$1,493	\$3,545	\$98,541

For FY 2007, APHIS established a performance target of having only one of the five main EPP programs (ALB, Citrus Health, GWSS, *Phytophthora ramorum* [*P. ramorum*], and EAB) unable to prevent the target pest or disease from escaping the quarantine area and causing significant economic or environmental damage. The Agency met this goal, as only the EAB program experienced outbreaks outside of the quarantine area that caused significant damage. EAB is spread easily through firewood and nursery stock, and the program continues working to prevent such spread and improve detection and control methods.

#### Asian Longhorned Beetle (ALB):

In FY 2007, APHIS had approximately \$23 million available for ALB eradication -- \$20 million in appropriated funds and \$3 million in appropriated carryover funds. With these funds, the program continued surveys in Illinois to verify eradication, which is anticipated in April 2008. In New York, the program continued ground surveys in Manhattan, and area-wide treatments in Manhattan, Western Queens, and Brooklyn. The New York quarantine (i.e. regulated area) encompasses 140 square miles, and covers most of Manhattan as well as parts of northern Brooklyn, and Queens in New York City as well as the Islip and Amityville areas on Long Island. Survey and treatment activities are being conducted in bands from west to east in New York City, and from east to west on Long Island. The program expects to declare all of New York eradicated by FY 2034. In New Jersey, the program conducted surveys in the Jersey City/Hoboken (Hudson County) outbreak area to verify eradication, which is expected in July 2008. Also in FY 2007, the program began addressing a new emergency area in and around Linden, New Jersey (Union and Middlesex Counties), and on Prall's and Staten Islands in New York City (Richmond County). The program removed all infested and high-risk trees within a quarter mile of the infestation and applied a preventative insecticide to healthy trees further away from the infestations. To ensure that no infested wood is moved, the program quarantined 25 square miles in Union and Middlesex Counties to restrict the

movement of firewood, wood, woody debris, and nursery products within 1.5 miles from detection sites. The program expects to declare Union and Middlesex Counties eradicated in FY 2013 at the earliest, and Richmond County eradicated in FY 2015 at the earliest.

The ALB program's FY 2007 performance targets were 241 square miles infested and 166 square miles regulated. The program met both of these targets, as 237 square miles were infested and 165 were regulated by the end of FY 2007. The 241 square miles infested assumes an estimate of nine square miles for Staten Island. The program later determined the actual infested area on Staten Island to be five square miles. This program's initial FY 2007 targets were 228 square miles infested and 157 square miles regulated. The 228 figure was later increased to 241 to include the nine square miles on Staten Island and four square miles in Jersey City. The Jersey City area were originally projected to be eradicated in FY 2007, but will not be eradicated until FY 2008. The 157 figure was later increased to 166 to account for the nine square miles on Staten Island. In some cases, the program does not regulate certain infested areas if they do not present a risk of artificial spread of ALB.

*Citrus Health Response Program:*

During FY 2007, APHIS worked to protect the health of the citrus industry through a regulatory program governing the movement of fresh citrus fruit, nursery stock, and other citrus products to prevent the spread of citrus canker and citrus greening outside of Florida. The regulations limited the interstate movement of fresh citrus fruit to non-citrus producing States and required pre-harvest grove inspections to show freedom from citrus canker. Fruit must be treated with an approved disinfectant and found free of canker lesions to be eligible to move under a limited permit. During the 2006-2007 shipping season, more than 19.3 million bushel cartons of fresh citrus fruit moved to non-citrus States while nearly 15 million bushel cartons were exported outside the U.S. The program also restricted the interstate movement of citrus nursery stock due to the presence of citrus canker and citrus greening. Restrictions were placed on the movement of host plants of the Asian citrus psyllid, an insect vector for citrus greening disease, from the entire States of Florida and Hawaii, the Commonwealth of Guam and Puerto Rico, and 32 counties within the State of Texas. These host plants must be treated with an approved insecticide, inspected and found free of Asian citrus psyllids as a condition for movement. The State of Florida developed a nursery certification program aimed at producing certified, disease-free citrus plants for replanting purposes. Effective January 2007, all citrus nursery stock must now be produced in above-ground containers within insect-resistant enclosures 1-mile from commercial groves.

During FY 2007, surveillance activities continued in all citrus-producing States targeting citrus canker, citrus greening, citrus variegated chlorosis, citrus nematodes and other exotic pests in both commercial citrus groves and high risk areas, such as, residential properties, nurseries, and packing facilities. Citrus greening is now found in 28 Florida counties and encompasses most of the area where commercial citrus is produced. Additional surveys for citrus greening were performed in Texas. All samples submitted to date from California, Hawaii, Louisiana, Texas and Puerto Rico for citrus greening testing using molecular diagnostics have been negative for the disease. New pest response guidelines for citrus greening were updated and now are being developed for citrus variegated chlorosis.

In November 2007, APHIS published a final rule amending the citrus canker regulations by eliminating the requirement for pre-harvest surveys before allowing fresh citrus to be shipped out of Florida. The new rule continues to require treatment and inspection of the fruit at approved packing houses. This change will relieve some restrictions on interstate movement of citrus fruit from Florida while continuing to prevent the spread of citrus canker.

*Emerald Ash Borer (EAB):*

Using funding from both the Emerging Plant Pests line item and the Commodity Credit Corporation (CCC) in FY 2007, APHIS continued working with Michigan, Ohio, and Indiana to address EAB through intensive survey and regulatory activities. From June to September 2007, APHIS confirmed new

detections of EAB in the states of Pennsylvania, Illinois, Maryland, and Michigan and continued to work with the States to address both the new infestations and maintain regulatory and control programs. To prevent further artificial spread of the pest, the program regulates EAB host materials such as logs, firewood, and nursery stock. In FY 2007, APHIS maintained 714 compliance agreements with businesses that deal with host materials. Regulatory personnel conducted 12 special operations, primarily associated with non-commercial firewood and logging activities, and included large public venues and ferry operations, which were excellent opportunities for public outreach and education. EAB Program management staff also held two EAB clinics and three workshops for educational purposes, inviting state, tribal, municipal, and industry participants.

Because EAB was unknown before its first U.S. detection in 2002, the program has been limited by the lack of an effective trap and practical, cost-effective control tools. However, APHIS and cooperating scientists have identified several promising chemical treatments and biological control agents, and program officials believe several treatment options will be available by FY 2009. Until these treatment options are available, the program is concentrating on the survey, regulatory, and outreach activities described above.

*Glassy-Winged Sharpshooter (GWSS):*

In FY 2007, APHIS had approximately \$26 million available to control GWSS. This total consisted of \$24 million in new appropriated funds and \$2 million in carryover appropriated funds. With these funds, APHIS continued working with the California Department of Food and Agriculture (CDFA) on a Statewide management program to minimize the Statewide impact of Pierce's Disease (PD) and its vectors, and reduce GWSS populations without significantly affecting agricultural production areas. Since FY 2003, this program has contained the GWSS within eight California counties where it is established (Kern, Los Angeles, Orange, Riverside, San Bernardino, San Diego, Tulare, and Ventura). In FY 2007, APHIS and CDFA conducted area-wide management programs in major citrus-producing areas of Kern, Riverside, and Tulare Counties. These programs were highly successful at suppressing GWSS populations and maintaining rejections of bulk citrus at low levels. These low rejection levels enabled citrus growers to comply with State regulations and move their products to packing houses for export. In July 2007, the program found three adult GWSS outside the quarantine area in northern Tulare County (southeast of Fresno). In response, the program applied foliar treatments within a half mile of these finds. The finds were apparently due to natural spread and the economic impact was minimal. Overall in FY 2007, the program applied area-wide treatments to 31,165 citrus acres in Kern, Riverside, and Tulare Counties. State officials continued to inspect nursery stock for GWSS life stages at originating and destination counties. During FY 2007, 49 GWSS interceptions were made on nursery shipments, with 64 egg masses and two adult female GWSS (one in Napa County, one in Monterey County) that would have gone to uninfested areas of California. One of the interceptions had emerging nymphs. This data compares to 49 interceptions in FY 2006 with 62 egg masses. Two of the interceptions with egg masses also had emerging nymphs. Any interception or egg mass find has a detrimental effect on the nursery industry through increased regulations. This program's performance measure is the number of adult detections per trap in certain counties. In FY 2007, APHIS projected targets of less than one for Kern County, less than 1.5 in Tulare County, and less than 2.5 in Riverside County. The actual number of detections per trap fell within the targets for each county (0.75 for Kern, 0.41 for Tulare, and 2.05 for Riverside).

*P. ramorum:*

In FY 2007, APHIS had \$5.282 million available to control *P. ramorum*, the pathogen that causes Sudden Oak Death (SOD). The \$5.282 million total consisted of \$3.1 million in appropriated funds, \$1.538 million in carryover funds from the CCC, and \$682,000 in appropriated carryover funds. This program works to contain *P. ramorum* within the 14 infested California counties by preventing the interstate movement of infested nursery stock and plant products from infested areas. The program is achieving success at reducing the presence of the disease in the nursery system and shrinking the quarantine area. In addition, there was no evidence in FY 2007 of SOD establishment outside the quarantined area. This program met

its FY 2007 target of detecting 57 percent of nurseries that were or most likely were infected with *P. ramorum*.

Sirex:

In FY 2007, APHIS had \$3.6 million in carryover appropriated funds available to respond to *Sirex noctilio*, an exotic woodwasp. This pest has caused up to 80 percent tree mortality in Southern Hemisphere pine plantations planted with North American pine species. *Sirex* is native to Europe, Asia, and Africa, and the first reported reproducing population in North America was found in New York State in FY 2004. Since then, it has been detected in Michigan, Pennsylvania, Vermont, and Ontario Province Canada. Currently, this pest is known to infest 29 counties in New York; more than 20 counties in central and lower Ontario Province, Canada; six counties in Pennsylvania; one county in Michigan; and one county in Vermont. In FY 2007, the program continued delimitation surveys in New York and Pennsylvania to track the pest's distribution and determine target areas for releasing biological control agents. These surveys extended 100 miles beyond the known infested counties. The program employed two survey methods: trap trees, which are stressed to release volatile chemicals that attract the wasp, and bait traps. Because *Sirex* was detected in 2006 Canadian surveys near the border of Michigan's Lower Peninsula, program surveys in 2007 extended into Michigan and Ohio. States bordering New York and Pennsylvania -- Connecticut, New Jersey, Massachusetts, and Vermont -- were also targeted for survey. In addition, the program conducted surveys in high-risk Western States. On the regulatory front, the program is pursuing domestic and international federal quarantine regulations to prevent the human-assisted movement of *Sirex*. In January 2007, APHIS began mass producing a parasitic nematode in preparation for full-scale releases in the fall of 2008. The program hopes that once this biological control agent becomes established, it will reduce *Sirex* populations and the associated damage. This promising long-term management strategy requires continued releases of the nematode, along with surveys and regulatory activities. Eventually, APHIS hopes to transfer the mass production technology to State and Federal agencies. This comprehensive program has been proven successful in Southern Hemisphere countries at maintaining *Sirex* populations below economically damaging levels.

Karnal Bunt (KB):

In this program, APHIS works to convince trading partners that KB presents only a grade and quality issue, not a phytosanitary risk requiring quarantines. KB is not a quarantine pest since it has only minimal effect on wheat quality and yield, and cannot establish itself in every climatic condition. In Arizona, the program regulates approximately 666,000 acres, which include 264 wheat fields that were tested for bunted kernels before harvest. A total of 236 grain fields tested negative for bunted kernels and 16 grain fields were found to have one or more bunted kernels. The grain produced from the positive fields was safeguarded and delivered to cattle feedyards, where it was treated during the milling process. The equipment used to handle the positive wheat was cleaned according to protocol before leaving the regulated area. All 12 wheat seed production fields inside the regulated area tested negative for bunted kernels, but three of these fields were contaminated with teliospores. The program made these three fields ineligible for seed, and the seed was marketed as grain. Breeder seed was produced in the regulated area, and all 41 seed lots that were tested for bunted kernels were negative. However, three lots were found to contain teliospores and were destroyed. All five of the National Survey samples that were collected from Yuma County tested negative for bunted kernels. As a result of the 2007 sample results, there will be no change in the regulated area in FY 2008. In Texas, all 25 seed samples, eight hay samples, and 168 grain samples tested negative for teliospores. These results convinced the program to de-regulate approximately 20,000 acres in Baylor County, 11,000 acres in Knox County, 4,000 acres in Throckmorton County, and 1,000 acres in Young County. The remaining regulated area in Texas consists of approximately 12,000 acres in Young County and 6,000 acres in Throckmorton County. For the National Survey, all 1,230 samples submitted by 18 western States and all 287 samples submitted by 17 eastern States tested negative for Karnal Bunt.

7. Golden Nematode

APHIS works to prevent potatoes and other solanaceous plants from being infested with golden nematode and to control the pest in known infested areas. The program facilitates international and interstate agricultural shipments by strictly enforcing quarantine requirements and maintaining a risk-based management system.

The golden nematode was first detected in the United States in Long Island, New York in 1941. Through an effective regulatory and control strategy, the program has successfully confined the infestation to 6,185 acres in nine counties of New York State. Many countries prohibit the importation of potatoes and other commodities from regions infested with golden nematode; however, the cooperative State-Federal program has protected even most of New York State from trade restrictions. Annually, potato, tomato, and eggplant crops contribute \$80 million to New York's economy and \$5.7 billion to the nation's economy.

The Golden Nematode program conducts a State-wide survey of New York each year of all areas used for potato production, enabling the export and interstate shipment of a variety of agricultural products. In FY 2007, the program collected 8,794 soil samples from 4,395 acres in the State. A new detection of the nematode was made on a single potato production field within the existing quarantined area.

APHIS prevents the golden nematode from spreading through regulatory requirements for the cleaning of all equipment that comes into contact with soil in infested areas and a mandatory crop rotation schedule for infested areas used in potato production. The program maintains personnel on standby to clean farm equipment whenever needed in order to allow potato producers to continue time-sensitive processes such as harvest while protecting uninfested areas. In FY 2007, the program exceeded its target for regulatory treatments conducting 950 regulatory treatments and surpassing FY 2006 by 238 (due in part to two grower auctions of farm equipment in the regulated area).

In addition to cleaning requirements for equipment, APHIS and the New York Department of Agriculture and Markets require producers on affected land to use a 4-year crop rotation schedule designed to keep golden nematode population levels to a low, manageable level. The schedule requires that growers plant golden nematode-resistant potato varieties for 2 consecutive years (followed by a non-host crop and then any potato variety, before starting again with 2 years of resistant varieties). To ensure that marketable golden nematode-resistant varieties are available, the Agency provides funding (along with USDA's Agricultural Research Service and the New York Department of Agriculture and Marketing) for the development of new potato varieties at Cornell University. Growers now have 45 nematode resistant potato varieties from which to choose.

Based on its success in containing the golden nematode for more than 60 years, the program is serving as a model for the Canadian response to the golden nematode detection in Quebec. In FY 2007, the Golden Nematode program in New York continued to provide expertise and assistance to the Idaho potato cyst nematode project.

#### 8. Grasshopper and Mormon Cricket

The Plant Protection Act authorizes APHIS to cooperate with Federal land management agencies, State agencies, and private landowners to control grasshoppers and Mormon crickets on western rangelands. The Plant Protection Act also specifies that APHIS pays for the full cost of conducting treatments on Federal lands, 50 percent of the cost on State lands, and one-third of the cost on privately owned lands. Surveys are an essential first step in determining the species and extent of grasshopper infestations and whether there is a need for suppression treatments. APHIS conducts surveys in the spring to pinpoint areas that may need treatments later in the season. These surveys begin in February or early March, when Mormon crickets and grasshoppers start to hatch. APHIS also conducts fall, or adult insect, surveys and uses the data to produce hazard maps that indicate which areas may have high populations the next year. We provide these maps to State cooperators and academic researchers and use the information to plan for outbreaks that may develop in the next year.

Surveys found relatively few grasshopper or Mormon cricket outbreaks in FY 2007, and, accordingly, control treatments decreased from FY 2006 levels. The reduction in grasshopper outbreaks is likely due to a lack of favorable conditions for grasshoppers. For example, some areas that experienced drought in FY 2006 recovered, and grasshoppers do not cause as much damage to rangeland in years with adequate rainfall. In regard to Mormon crickets, outbreaks of this pest can last anywhere from 5 to 20 years, and the Mormon cricket outbreak that started in 2000 appears to have peaked and begun declining. In FY 2007, APHIS conducted treatments to protect 182,221 acres. By comparison, treatments were requested to protect 238,467 acres in FY 2006. The following chart shows the FY 2007 acres protected by State:

State	Acres Protected
Idaho	30,551
Montana	915
Nevada	25,002
Oregon	33
Utah	124,200
Washington	1,520
Total:	182,221

APHIS is conducting a programmatic consultation with the U.S. Fish and Wildlife Service and the National Oceanic and Atmospheric Administration concerning 205 threatened and endangered species that could be affected by grasshopper or Mormon cricket suppression treatments. Currently, APHIS must conduct individual biological assessments for each area or State where suppression treatments are needed. Once the programmatic consultation is completed, we will be able to conduct treatments according to standardized environmental guidelines.

The grasshopper and Mormon cricket program met its performance target for FY 2007 of conducting surveys in all 17 States affected by these insects.

#### 9. Gypsy Moth

Gypsy moth is a destructive insect of trees. The goal of the program is to define the extent of the European gypsy moth infestation and limit its artificial spread beyond the infected area through quarantine and an active regulatory program. In FY 2007, APHIS and its State cooperators continued to conduct survey activities for both Asian and European gypsy moth to detect and delimit any isolated populations. As part of these efforts, the program deployed approximately 250,000 traps nationwide. Asian gypsy moth (AGM) is not established in the United States, but survey efforts revealed two introductions of this biotype in FY 2007. APHIS plans to carry out eradication activities for these two introductions as well as approximately eight isolated European gypsy moth infestations in FY 2008.

European gypsy moth is established in all or parts of 19 eastern States, and APHIS and State cooperators conduct regulatory activities within the generally infested area to prevent human-assisted spread of the pest. These efforts include inspection, treatment, and certification of regulated articles such as logs, nursery stock, and mobile homes for movement from infested to non-infested areas. Outdoor household articles, such as lawn furniture, are also regulated; because of the large number of household moves each year, homeowners are required to inspect and self-certify their belongings to supplement Federal and State resources.

Although the European gypsy moth is a relatively slow-moving insect and human-assisted gypsy moth spread poses the biggest threat to U.S. natural resources, the pest spreads into areas bordering the quarantined zone naturally each year. APHIS monitors the transition zone along the 1,200 mile-long border of the infested area to ensure that newly infested areas are added to the quarantined zone and regulated effectively. In FY 2007, six new counties were found to be infested and added to the quarantined

area. This action allows APHIS and State cooperators to ensure that businesses and residents in the newly infested areas comply with regulations designed to prevent long-distance spread of the pest.

To address a particularly high-risk pathway for Asian gypsy moth, the program continued cooperative offshore risk-reduction activities with the Russian Department of Forestry and Department of Quarantine. Vessels departing for the United States from 10 Russian ports are inspected for gypsy moth, and those found to have egg masses are cleaned before they leave the port. APHIS monitors the effectiveness of these efforts through DNA analysis of all Asian gypsy moths detected in the United States. In FY 2007, the program inspected approximately 500 vessels at Russian ports and met its performance target of preventing Asian gypsy moth introductions linked to Russia. Additionally, in FY 2007, APHIS implemented an agreement with Japan's Ministry of Agriculture, Forestry, and Fisheries whereby vessels are inspected for AGM and any AGM life forms found are removed prior to departure from Japanese ports where high populations of AGM are known to be present.

#### 10. Imported Fire Ant (IFA)

In FY 2007, the program continued working with infested States to accomplish its goal of preventing the artificial spread of IFA through host materials such as nursery stock. The program conducted a series of regulatory blitzes to check that regulated articles moving outside the quarantine area had been properly treated in accordance with APHIS' quarantine regulations. These quarantine regulations, which require that host materials from infested areas be certified free of IFA, are our primary method of preventing the pest's spread. The blitzes were coordinated among Oklahoma, New Mexico, Arkansas, Tennessee, and North Carolina, several of the States that form the leading edge of the current IFA-infested area. In FY 2007, the program continued working on protocols to certify pine straw, apiary equipment, baled hay, and baled-and-burlapped nursery stock as IFA free. In addition, training sessions with nursery inspectors, and public meetings with growers and producers were held in Georgia and Tennessee.

APHIS and its cooperators are continuing a biological control project using various species of phorid flies, *Pseudacteon spp.*, a natural enemy of imported fire ants. With technical support and funding from APHIS, State officials conduct releases in infested areas with the hope that the flies will become established and ultimately spread over entire areas. The presence of the flies should negatively impact IFA populations and allow native ants to compete for resources, thus aiding in the restoration of the ecological balance. Preliminary data from a USDA-Agricultural Research Service integrated pest management project utilizing the flies, along with another biological control agent and insecticidal bait applications, has shown that IFA populations can be controlled with fewer insecticide applications over time when biological control agents are in place.

Since Spring 2002, 82 releases involving two species of phorid flies have been completed or scheduled (12 in calendar year 2007), with several releases in each of the 13 States/territories under Federal quarantine. Flies have been successfully established in parts of at least 11 States/territories. The program ultimately plans to introduce six to eight species of flies, with plans on track to add the third species by calendar year 2008.

In FY 2007, APHIS met the performance target of no IFA infestations outside of regulated areas. APHIS expects to maintain the zero infestation level for the future.

#### 11. Johne's Disease

Johne's disease is a chronic, infectious, and usually fatal intestinal disease of cattle that also occurs in sheep, goats, and deer. It is a bacterial disease caused by a bacillus, *Mycobacterium avium*, subspecies *paratuberculosis*. The disease is spread by shedding organism in the feces of infected animals. Since the organism is resistant to temperature changes and drying, it persists in the environment for long periods of time. There is no effective treatment for Johne's. The unknown infection status of most herds, lack of

control measures within infected herds, and difficulty of diagnosing carrier animals makes Johne's disease a threat to all cattle.

The current APHIS Johne's program focuses on two primary areas: voluntary certification of test-negative herds, and disease management to help herds in achieving disease freedom. The Voluntary Bovine Johne's Disease Control Program (VBJDCP) intends to reduce the percentage of dairy cattle herds infected; increase the number of seed stock producers in the test negative program; and decrease the percentage of infected cattle within herds (decrease within-herd prevalence).

For FY 2007, 49 States (including Puerto Rico), were in full compliance with the national program standards with the program goal being 45 States enrolled. Only two States, Massachusetts, and Montana, have not adopted the VBJDCP. By the end of the reporting period for FY 2007, 8,966 herds were enrolled in the VBJDCP, with the goal to enroll 9,000 cattle herds. The program did not reach its underlying goal to enroll at least 15 percent of the dairy herds in the nation, but did enroll 11 percent of the target population.

Approximately 20 percent of cattle herds enrolled in the VBJDCP have a test-negative herd classification for Johne's, below the target of 30 percent. Since this program is voluntary, the ratio of test-negative to test-positive producer participation cannot be controlled. In FY 2007 the program certified 1,773 test negative herds, 727 less than the program goal. Enrolling fewer test-negative herds may also indicate that there are fewer Johne's free herds in the country than estimated through prevalence studies or that herds free of the disease perceive less benefits from the program. The program will continue to strive towards achieving its aggressive performance targets in the VBJDCP.

In FY 2006, APHIS changed program testing protocols for the Johne's control program to include pooling fecal samples for Level 3 of the test negative program. Level 3 is the third of four levels of testing procedures. The levels correspond to the amount of confidence that the program has that the herd is free of Johne's. Complying with level one requirements provides the herd with 85 percent confidence that it is clean. Level two is 90 percent, level 3 is 95 percent, and level four is 98 percent confidence that the herd is Johne's free. Pooling fecal samples reduces testing costs up to \$7,200 per herd depending on the size of the herd. Modeling shows similar herd level sensitivity when compared to that of individual fecal cultures.

In cooperation with States, affected industries, and producers, APHIS recently updated a national Johne's disease strategic plan to help reduce the prevalence of the disease in the United States. The strategic plan includes the VBJDCP, which provides testing guidelines for States to use to identify cattle herds at low risk for Johne's disease infection. Currently, the program is supporting a national demonstration project. In FY 2003, the program implemented pilot studies focusing on current testing schemes and control methods in each region of the country. Seventeen States are involved in this project, encompassing 75 dairy herds and 26 beef herds. To date, 38 papers or abstracts have been published and over 68 presentations have been made (not including over 30 producer or veterinary seminars). At least nine additional projects have been started using national demonstration herds as the setting for additional studies.

## 12. Low Pathogenic Avian Influenza (LPAI)

The national H5/H7 Low Pathogenic Avian Influenza (LPAI) program's goal is to prevent and control H5 and H7 avian influenza (AI) from entering and spreading in commercial and backyard poultry flocks and the live bird marketing system causing significant economic damage. LPAI H5 and H7 virus subtypes can mutate into highly pathogenic forms that are extremely infectious and fatal to domestic poultry. The historic outbreak of highly pathogenic H5N2 in the northeastern United States in 1983 and 1984 resulted in destruction of more than 17 million birds at a cost of nearly \$65 million. The outbreak also caused retail egg prices to increase by more than 30 percent.

*National Poultry Improvement Plan - Commercial Poultry Industry*

During FY 2004, APHIS initiated an H5/H7 LPAI surveillance program in commercial poultry following adoption by National Poultry Improvement Plan (NPIP) participants. This program continues to greatly increase the amount of LPAI surveillance conducted in commercial poultry. The increase of surveillance enhances APHIS' ability to detect and respond to disease findings and facilitate trade through the documentation of disease-free status.

As part of the regulation, 9 CFR 56.10, States are required to develop an initial State response and containment plan for the disease. This plan is a requirement for individuals or companies to qualify for indemnification of H5/H7 LPAI infected poultry within a State. As of FY 2007, 44 States have submitted response and containment plans for H5 and H7 LPAI to the NPIP for review.

In FY 2007, APHIS had 44 response and containment plans. APHIS has approved 28 of the plans which met the NPIP H5/H7 requirements. The 44 plans submitted include states with high concentrations of commercial poultry populations. The 28 States with approved plans include: Alabama, Arkansas, California, Colorado, Delaware, Florida, Georgia, Idaho, Indiana, Iowa, Kentucky, Louisiana, Maryland, Minnesota, Mississippi, Missouri, Nebraska, North Carolina, Ohio, Oklahoma, Oregon, Pennsylvania, South Carolina, Tennessee, Texas, Virginia, Washington, and West Virginia.

#### Live Bird Marketing System (LBMS)

In 2004, APHIS implemented a Federal-State partnership program for the prevention and control of H5/H7 LPAI in the live bird marketing system. All LBMS, producers, and distributors that supply the markets must be registered or licensed with the State and must allow Federal and State inspectors access to their facilities, birds, and records. These facilities must also have written biosecurity protocols in place. APHIS coordinates and administers the program, and provides personnel and resources to assist States with the implementation of, and compliance with, the program requirements.

Surveillance in the LBMS remains a high priority. As of FY 2007, APHIS had initiated cooperative agreements with 33 States/Territories for monitoring LBMS activities (Alabama, Arkansas, California, Colorado, Connecticut, Delaware, Florida, Georgia, Indiana, Iowa, Idaho, Kentucky, Massachusetts, Maryland, Maine, Minnesota, Missouri, Nevada, North Carolina, New Hampshire, New Jersey, New York, Oklahoma, Ohio, Oregon, Pennsylvania, South Carolina, Texas, Virginia, Vermont, Washington, Wisconsin, and Puerto Rico). In February 2007, the LBMS working group, comprised of States, Industry, and USDA, met to address prevention and control of LPAI H5 and H7.

As part of USDA's continued initiative to combat H5/H7 LPAI, APHIS facilitated a LBMS training course in August 2007, at the University of California School of Veterinary Medicine in Davis, California. The purpose of the course was to inform and familiarize State and Federal employees working in the LBMS throughout the United States with various aspects of the LBMS. Eighty-two State and Federal personnel from 23 States and territories in addition to representatives from 9 nations attended the course.

From July 2006 to June 2007, 87,690 samples were collected from 22 States by animal health technicians and veterinary medical officers at both the State and Federal level. These samples were submitted to National Animal Health Laboratory Network laboratories to be tested for the presence of AI antibodies on agar gel immunodiffusion. Agar gel immunodiffusion is used to test the presence of antibodies with the purpose of knowing a history of exposure. In addition, 121,963 samples from 28 States were submitted to be tested for the presence of AI virus by real-time reverse-transcriptase polymerase chain reaction. Real-time reverse-transcriptase polymerase chain reaction enables timely testing of current infection within chickens and turkeys. Also, 117,464 tracheal/oral pharyngeal swab samples from 16 States were submitted to be tested for the presence of AI virus by virus isolation. Virus isolation is used on ducks and other waterfowl due to the chance of false positives with other tests. This represents a total number of 349,073 samples for FY 2007 as compared to 322,995 samples tested for FY 2006. The number of tests enables APHIS to conduct and efficient active surveillance by testing all avenues with which the disease might enter the marketplace.

### 13. Noxious Weeds

The Noxious Weeds program works with State and local cooperators and private organizations to contain or eradicate noxious weed infestations. In addition, it provides national guidance on weed management policy to cooperators by developing control methods and conducting environmental assessments of treatment options. In FY 2007, APHIS found regulated weed species in several States. The program found hydrilla in Wisconsin, the first find in that State, and is working to eradicate it. In addition, the program discovered onionweed in Arizona and is eradicating that weed as well. In Virginia, *Orbanche ramosa* (hemp broomrape) was found at three sites (Norfolk, Washington County, and Russell County). The program is eradicating the weed in Norfolk and Washington County, and is working to control it in Russell County, where it has become established. In Caddo Lake in Texas and Louisiana, the program found giant salvinia and hydrilla and is working with cooperators on a biological control and aquatic vegetation management plan. Also in FY 2007, APHIS conducted a pest risk assessment on new detections of wavy leafed basket grass in Maryland. While State cooperators are eradicating these finds, APHIS officials are working to determine whether this weed represents a new species that needs to be regulated. Regarding ongoing efforts, the program continued addressing tropical soda apple (TSA) - primarily in Alabama, South Carolina, and Tennessee - and Benghal dayflower (also referred to as tropical spiderwort) - in Mississippi, North Carolina, and South Carolina.

In FY 2007, APHIS continued to work with the Federal Interagency Committee for the Management of Noxious and Exotic Weeds (FICMNEW) on the "Pulling Together" Initiative. This initiative supports the creation of local Cooperative Weed Management Area partnerships that focus on mitigating the threat of invasive weeds. In FY 2007, APHIS funding for this effort supported survey, eradication, and site restoration activities involving weeds such as giant hogweed, giant salvinia, hydrilla, and saltcedar in several States. In addition, APHIS revised environmental documentation to allow the use of the new herbicide Milestone to treat infestations of giant hogweed and goatsrue.

To measure progress, the program tracks acres infested and treated for several weed species, including Bengal dayflower in several southern States; TSA in Alabama; common broomrape (*Orobancha minor*) in Georgia; and giant hogweed in Oregon. In FY 2007, the program met or exceeded its goals for each of these weed species.

### 14. Pink Bollworm (PBW)

The PBW is one of the most destructive pests of cotton in many of the major cotton-growing regions of the world. The goal of the PBW eradication program is to eradicate the PBW from the infested areas of the U.S., essentially the southwestern portion of the Cotton Belt. Two key operational elements of the program include *Bacillus thuringiensis* (Bt) transgenic cotton and sterile moth releases.

Planting of the Bt transgenic cotton varieties is highly encouraged as they provide an exceptional level of control for PBW. The program maintains full compliance with the Environmental Protection Agency's (EPA) Refuge Requirements, designed as a strategy for insect resistance management (IRM). During the 2007 season, limited areas within the program were authorized by EPA and state agencies to use up to 100 percent Bt cotton in combination with the release of sterile moths.

The program released sterile moths on all cotton fields in the eradication region including Bt transgenic and conventional cotton. This component is particularly important as a final control measure to achieve eradication. PBW sterile moths produced in the PBW rearing facility in Phoenix were aerially released at a rate of 100 moths per acre per day, beginning at the four-leaf growth stage and until defoliation or harvest.

In FY 2007, PBW populations continued to decline as a direct result of APHIS' expanding eradication program, with infestation levels within the program areas dropping by more than 95 percent over the last

two to three years. In Texas, relatively light PBW infestations occur around Corpus Christi and in the southern High Plains. These infestations should decline, and eventually be eliminated, as eradication is accomplished in the program area around El Paso. As the eradication program expands, many growers are paying approximately \$40 per acre in technology fees to purchase and plant Bt cotton. Bt cotton varieties provide significant PBW control, further increasing the effectiveness of sterile moth releases. In 2007, APHIS worked closely with EPA and southwest cotton growers to obtain approval for using up to 100 percent Bt cotton within the eradication areas. This allows sterile moth releases to be focused on the most heavily-infested areas. APHIS expects to eradicate this pest by FY 2013.

In FY 2007, APHIS met its performance targets of eradicating PBW from 35 percent of the infested cotton acreage and bringing 63 percent of the total PBW infested acreage into the eradication program. APHIS expects to continue making progress toward eradicating this pest.

#### 15. Plum Pox

Plum pox is a viral disease that significantly reduces the productivity of stone fruit including peaches, apricots, plums, nectarines, almonds, and sweet and tart cherries. The program seeks to mitigate and eradicate the Plum Pox Virus (PPV) outbreaks in the United States by regulating nursery materials, conducting field surveys, and eliminating infected trees in nurseries and orchards. The program is currently addressing PPV outbreaks in Pennsylvania, New York, and Michigan.

##### Pennsylvania

In 2007, PPV survey and laboratory crews collected and processed 230,319 samples from orchards, homeowner sites, sentinel trees, and wild trees during the survey season with no positive plants detected. This is the first time that this has happened in Pennsylvania since the initial detection of the disease in the fall of 1999. Surveys were conducted in the core counties of Adams, Cumberland, Franklin, and York with additional surveys conducted in Berks, Erie, and Lancaster counties. For the past 4 years, the number of positive plants detected has been 6 or less, remaining at or below the targeted performance goals. Scientific protocol requires 3 consecutive years of negative survey for a regulated area to be eligible for deregulation. Fifty percent of the remaining regulated area met the criteria in 2007, leaving just 54 square miles under PPV regulation in Pennsylvania. This number is down from the peak of 350 square miles in 2003.

##### New York

Detection of PPV in 3 plants from 2 orchards in New York in 2006 confirmed the presence of the virus. PPV was long expected to be established in the area due to the proximity of the New York orchards to the Canadian infection. Yearly monitoring surveys for PPV have been ongoing in the area since 2000. Surveys for PPV in 2007 resulted in the collection and testing of 91,461 samples. Twenty positive plants were detected in 5 orchard blocks in 2 counties. Twenty-seven acres of orchards were ordered destroyed as a result the detections. Surveys for PPV were conducted in Niagara, Orleans, Monroe, and Ontario Counties.

##### Michigan

Follow-up to the positive find at the Michigan research station in 2006 resulted in another intensive survey, expanding to include 3 additional research stations and 938 orchard blocks in Berrien, Van Buren, Allegan, Ionia, Ottawa, Muskegon, Oceana, Mason, and Leelanau counties. A total of 84,726 samples were collected and tested with no further detection of PPV. All prunus stock was destroyed at the research station where the initial positive plant was found.

#### 16. Pseudorabies

Pseudorabies is a viral disease of swine that most often manifests as a reproductive disease, neurological disease, and/or respiratory disease in swine. The pseudorabies virus (PRV) has existed in the swine population in the United States for at least 150 years. Older pigs can survive infection, becoming carriers of the pseudorabies virus for life. Animals other than swine can also become infected with pseudorabies and usually die shortly after infection. The virus does not cause illness in humans.

At the end of FY 2007, all 50 States and three territories were in Stage V, pseudorabies (PRV) free status, thus meeting the program's performance target. The last PRV outbreak in commercial production swine occurred in February, 2003 in Pennsylvania.

In FY 2007, there were 18 reported cases of herds with PRV infection: 7 in Texas, 2 in Alaska, 1 in California, 2 in Wisconsin, 1 in Georgia, 1 in South Carolina. One case was diagnosed as a mixed infection with swine brucellosis. All cases were confined to transitional swine production, with no spread to commercial production herds. Transitional production swine are defined in the Pseudorabies Program Standards as feral swine that are captive or swine that have reasonable opportunities to be exposed to feral swine. This classification of swine is differentiated from feral or wild swine that are free-roaming and from commercial production swine that are continuously managed and have adequate facilities and practices to prevent exposure to either transitional production or feral swine.

All positive animals were promptly depopulated. These 18 cases were in contrast to 12 cases reported in FY 2006 and 4 in FY 2005. The increase in cases was attributed to epidemiological trace-back work in Texas and other states, where cases were found in transitional herds that lacked adequate biosecurity protocols. However, none of these herds was located near or interacted with commercial-type operations.

New disease challenges in the commercial industry (Porcine Reproductive and Respiratory Syndrome, circovirus, etc.) mandate strict biosecurity and marketing protocols. These protocols allow little chance for infections in transitional swine operations to infect commercial swine operations. APHIS's focus has remained on emphasizing separation of feral and transitional swine from commercial swine production. The Agency requires States to develop feral-transitional swine management plans as part of their annual PRV reporting requirements.

Market swine surveillance (meat juice sampling) continued in FY 2007 as a major surveillance tool for the PRV program, as it expanded into three more plants in Kentucky, North Carolina, and Pennsylvania, in addition to its Iowa-Southern Minnesota-Nebraska base. APHIS found no commercial herd infections with meat juice sampling. For FY 2008, the sampling level will again be reduced in half, due to analysis by APHIS' National Surveillance Unit regarding appropriate sampling levels. In FY 2008, the Agency will continue integrating revised PRV surveillance as a part of a developing Comprehensive Swine Surveillance initiative.

## 17. Scrapie

Scrapie is a fatal, degenerative disease affecting the central nervous system of sheep and goats. Infected flocks that contain a high percentage of susceptible animals can experience significant production losses. The industry loss due to scrapie is estimated to be \$10-20 million annually, not including loss due to export restrictions.

The current APHIS scrapie program focuses on six primary areas: education and prevention, animal identification, surveillance, tracing of positive and exposed animals, cleanup of flocks through genetic susceptibility testing, indemnification of susceptible exposed animals, and, the Scrapie "free" Flock Certification Program (SFCP).

During FY 2007, 73 newly infected or source flocks in 24 states were identified and 83 existing were either cleaned up or put on a flock cleanup plan. Upon completion of the cleanup plan, the flocks are placed on

monitoring plans for five years. Thirty-eight infected or source flocks located in 21 States remained on clean up plans at the end of FY 2007. These flocks are also under movement restrictions.

As of October 10, 2007, 134,595 sheep and goat premises had been assigned identification numbers in the Scrapie National Generic Database, an increase of 13.4 percent from the previous year. The program has issued official ear tags to 99,903 of these premises (up 3.3 percent from FY 2006). There are currently 2,048 flocks enrolled in the SFCP, and of these, 411 are certified as scrapie-free, an increase of 114 during the fiscal year.

In FY 2007, the indicator of scrapie prevalence—the percent black-face sheep found positive at slaughter—continued to decrease, down 35 percent compared to FY 2006. This decrease exceeded the FY 2007 target for the long-term measure and the unit measure by 52 and 98 percent respectively. Black-face sheep have much higher scrapie prevalence than white-face or mottled-face sheep, making them the best population for assessing progress. There was also a 37 percent reduction in the number of new infected and source flocks identified during the fiscal year. During FY 2007, the program sampled 47,697 animals (42,759 at slaughter facilities and 4,938 at other sites) for scrapie testing, an increase of 11 percent over the previous year. Despite this increase, the scrapie program did not reach its ambitious performance goal of collecting 50,000 samples in FY 2007. This was due in part to continuing efforts to increase the efficiency of scrapie sampling by decreasing the percentage of white-face animals sampled at slaughter.

Through APHIS' Small Plants Initiative, sampling has increased at low volume plants by contracting with the establishments to either ship the animal heads to a centralized collection facility or to collect samples on-site. This effort has enabled collection of a greater number of samples from a larger geographic area, and will allow the program to meet the target for sample collection in FY 2008. APHIS also initiated increased surveillance in goats in FY 2007 to establish the prevalence of scrapie in this population.

In FY 2007, a rectal biopsy procedure was evaluated as a new live animal test method. The data collected to date indicate that rectal biopsy may be superior to third eyelid biopsy for ante-mortem diagnosis of scrapie in sheep and goats. This would be the first live animal test for goats.

An obstacle that is likely to impede the program in future years was the discovery of a new scrapie type, Nor98-like scrapie, in the United States. Five cases were found in sheep originating from Wyoming, Colorado, Indiana, Minnesota, and California. This scrapie type is problematic because goats and all genotypes of sheep appear to be susceptible, making depopulation the preferred option for handling exposed animals. APHIS is collaborating with ARS to better characterize this scrapie type. Data from Europe indicate that Nor98-like scrapie may occur sporadically and as such may not be eradicable through current methods. APHIS is working through the World Organization for Animal Health to determine the best long-term strategy for addressing Nor98-like scrapie and similar non-classical scrapie types.

APHIS' National Veterinary Services Laboratories (NVSL) has been a critical participant in the implementation of the scrapie eradication program over the past five years. There are currently 25 cooperating labs approved for scrapie testing and nine laboratories approved for genotype testing. NVSL also maintains a blood donor flock of sheep with diverse genotypes that are used to provide check tests for the approved labs.

APHIS will continue to provide indemnity assistance and testing for producers that experience scrapie infection or exposure in their flocks. The indemnities greatly promote the effort in controlling the disease through the depopulation and disposal of infected and exposed animals. Indemnity payments and genotype testing assist producers to remain viable by providing funds for repopulation and by minimizing the number of exposed animals that must be removed.

Finally, as a result of efforts beginning in 2004, the scrapie program has recognized operational savings each year since. The effort to allow private laboratories to genotype samples has introduced the economic element of competition, thereby lowering the cost to producers and to APHIS for the tests. The genotype

testing is used to identify sheep that are resistant to scrapie. This testing is not related to disease diagnostic testing, which is done by NVSL and the National Animal Health Laboratory Network. In FY 2007, APHIS estimates the cost savings for genotyping to be \$227,661 for that given year. Advancements in testing procedures during 2004 led to an immunohistochemistry test requiring one slide instead of two. This resulted in a 50 percent cost savings, or \$1,068,975 in 2007. Lastly, by reducing the number of lower-risk white-faced sheep sampled at slaughter, APHIS saved an estimated \$371,650 in test and labor costs. As a result the program exceeded the FY 2007 target for the economic measure and the unit cost measure. The change in cost from initiation of the program is used to calculate cost savings.

#### 18. Tuberculosis (TB)

Tuberculosis (TB) is a common and deadly infectious disease caused by mycobacteria. There are various strains of mycobacteria, with mycobacteria bovis affecting cattle and cervids. TB was once the most prevalent infectious disease of cattle and swine in the U.S., and caused more losses among farm animals in the early part of the twentieth century than all other infectious diseases combined. Since the creation of the National Tuberculosis program TB has been nearly eradicated from the Nation's livestock population. Despite strong efforts the goal of eradication has remained elusive. Remaining challenges to the program include infected wildlife and infected cattle from Mexico.

During FY 2007 49 States and Territories maintained TB Accredited-Free (AF) status, including Puerto Rico and the U.S. Virgin Islands; two States, New Mexico and Michigan, remain regionalized; and Minnesota has Modified Accredited Advanced (MAA) status. Currently there are 15 States and the U.S. Virgin Islands that have achieved and maintained their TB free status for over 25 years; 22 States that have been TB free for 15 or more years; seven States that have been TB free for 10 or more years; Three States and Puerto Rico that have been TB free for five or more years; and two States and two regionalized zones which have had TB free status for less than five years.

In FY 2007, APHIS disclosed seven newly affected herds, six bovine and one captive cervid (white-tailed deer). This was a decrease from the nine herds discovered in FY 2006. Of the affected herds, two were bovine herds in Minnesota; one bovine and one captive cervid herd were found in Michigan; one bovine herd was found in Oklahoma, New Mexico, and Colorado each. All herds have been depopulated, except for New Mexico which is currently in the depopulation process. Slaughter surveillance for TB continues to exceed national goals, and three of the newly discovered herds were detected as a result of surveillance and epidemiologic investigations.

Given the six bovine herds discovered this year and the three herds that remain under quarantine from previous years, there were nine affected herds among the estimated 971,400 cattle herds in the U.S. at the end of FY 2007. The three herds that remain under quarantine are a dairy herd in New Mexico's MAA zone, and two dairy herds in Michigan's MAA zone. The national prevalence for FY 2007 is estimated to be 0.0009%, or one affected herd per 107,933 U.S. herds. Despite these outbreaks, TB is extremely rare.

APHIS continues to work to reduce the number of affected herds due to uncontrolled movement of infected animals (bovine and cervid) across the Mexican border. During FY 2007 an operation to remove all dairy operations from the El Paso, Texas milk shed was completed. This effort provides a buffer zone between the U.S. and the TB affected dairy operations immediately across the border in Juarez, Mexico. APHIS has developed a 5-year plan, *Strategic Plan for Reducing the Risk of Importing Tuberculosis Infected Cattle From Mexico 2008-2012*. This plan establishes a goal that Mexican TB eradication programs will reach the same level as U.S. programs by the end of 2012.

#### 19. Wildlife Services Operations

The Wildlife Services Operations program prevents or reduces conflicts between people and wildlife. State agencies, county and municipal governments, private homeowners, farmers, ranchers, and other property

owners rely on our expertise to help prevent, minimize, or manage wildlife damage. This damage can impact agriculture, property, natural resources, and even threaten public health and safety.

#### Airport safety

Wildlife strikes cost commercial aviation over \$600 million annually in the United States and \$1.2 billion annually worldwide. Through cooperative agreements in FY 2007, APHIS worked with 674 airports and airbases nationwide to mitigate wildlife hazards. In addition, our specialists provided training and technical assistance at airports in Costa Rica, Chile, and Nigeria. The Agency had many successful interventions to reduce wildlife hazards. For example, the Agency continued a program of Canada goose management at LaGuardia Airport in cooperation with the Port Authorities of New York and New Jersey that has reduced goose strikes by over 75 percent since 2004. The Agency also continued to manage the National Wildlife Strike Database, which holds over 80,000 reports on civil aircraft collisions with wildlife and provides a scientific foundation for managing wildlife hazards to aviation. APHIS also developed a program to provide all U.S. passenger-certificated airports with a customized risk-analysis report for use in evaluating and improving wildlife hazard management plans.

#### Damage Prevention

Roads, water drainage systems, and utilities are also vulnerable to wildlife damage and APHIS assists with the relocation of the wildlife that threaten these infrastructures. Beavers are one of the most destructive wildlife species, causing millions of dollars in damage to infrastructure from bridges to timber production areas. In Mississippi, North Carolina, and Virginia, the problem is so severe that APHIS conducts State-wide beaver damage management programs that also receive major funding from State agencies. In North Carolina alone, Agency officials estimated the beaver population at 500,000. By conducting management activities in FY 2007, the Agency prevented \$8.7 million in damages in North Carolina. Overall, APHIS prevented an estimated \$59.6 million in beaver damage in 20 states. For each dollar spent on this activity, depending on the resources involved, APHIS protected \$1.47 to \$23.80 worth of resources.

#### Disease surveillance

A key component of a national animal health surveillance system is the ability to identify potential pathways for animal diseases from wildlife to livestock. APHIS' 44 wildlife disease biologists provided technical assistance, conducted surveillance, and maintained control of over 20 wildlife viruses, bacteria, parasites and pathogens. For example, APHIS assisted with chronic wasting disease in 24 States by conducting surveillance, including emergency responses to Kentucky, Michigan, Minnesota, and Wisconsin; plague in 18 States by collecting samples from 7,043 animals; tularemia in 27 States by collecting 5,033 samples from wildlife; Classical Swine Fever in 20 States by sampling 2,080 feral swine; swine brucellosis and Pseudorabies in 20 States with surveillance and technical assistance in feral swine; bovine tuberculosis in Minnesota and Michigan by conducting emergency response activities to bovine tuberculosis detections in white-tailed deer; feral swine disease in North Dakota by enhancing surveillance; and Highly Pathogenic Avian Influenza (HPAI) nationwide by sampling wild, migratory birds and training over 180 individuals at 6 workshops specifically designed for HPAI surveillance. In FY 2007, APHIS reported no foreign animal disease outbreaks related to wildlife transmission that spread beyond the original area of introduction and caused severe economical and environmental damage.

#### Invasive Species

Nonnative, invasive predators can be devastating to ecosystems where a lack of natural enemies and competition for resources can allow these species to thrive, wiping out other native wildlife in the process. APHIS works to address these threats with efficient predator removal techniques without directly impacting populations of threatened and endangered species. Two invasive species of major concern are brown tree snakes (BTS) and nutria. BTS have eliminated several bird, lizard, and bat species on the island of Guam, is responsible for large economic losses from damaged electrical lines, and poses hazards to human safety

from bites. To prevent the unintentional introduction of the BTS on Hawaii and the continental United States, APHIS intercepted 13,594 BTS on Guam, which represents a 30 percent increase over the last fiscal year. The Agency also continued the use of the oral BTS toxicant, acetaminophen, resulting in a significant reduction of BTS from Guam ports of exit. Nutria are large, semi-aquatic rodents and cause extensive environmental and structural damage and also serve as a reservoir for tularemia and other diseases. APHIS is leading the first large-scale North American effort to eradicate nutria on the Delmarva Peninsula in Maryland. In cooperation with the U.S. Fish and Wildlife Service, Maryland, the U.S. Geological Survey (USGS), Tudor Farms (a 6,000-acre private wildlife management area), and 300 private landowners, APHIS has completed an initial nutria removal from more than 130,000 acres of coastal marsh in Maryland. Through careful population monitoring, APHIS has successfully prevented the re-infestation of this area, and marsh grasses and native muskrat populations are quickly recovering.

#### Livestock Predation

Coyotes, mountain lions, wolves and bears kill thousands of lambs, sheep, and calves each year. Even with a predation management program in place, predators killed more than \$71 million worth of livestock annually. Each State has different needs from APHIS based on type of predators and their livestock populations. In Texas, the largest cattle-producing state, the Agency protected over 1.73 million head of livestock by managing predation and saved producers over \$35.8 million. In the eastern States, coyote and vulture depredation conflicts have increased over the past few years, and the Agency has provided management assistance of those predators in Florida, Minnesota, Pennsylvania, Virginia, West Virginia, and Wisconsin. In Virginia, the Agency provided technical assistance to 347 people on coyote issues alone.

APHIS predation management also serves a conservation objective in the restoration of endangered predators, such as wolves, and other endangered species that wildlife predators prey upon. In the western States, Agency personnel responded to over 570 wolf damage requests and classified more than 700 livestock as confirmed or probable wolf kills. APHIS continued to partner with the Wisconsin and Minnesota Departments of Natural Resources to manage wolf damage in their respective States after Federal delisting of these gray wolf populations occurred in March 2007. APHIS hazed wolves from livestock areas and when necessary removed wolves to prevent additional losses. In Utah, the Agency also conducted predation management activities for the protection of species such as mule deer, bighorn sheep, sage grouse, nesting shorebirds and endangered black-footed ferrets and Utah prairie dogs.

#### Rabies Operations

The Centers for Disease Control and Prevention (CDC) reports that wildlife currently account for greater than 90 percent of reported cases of rabies in the United States. APHIS' National Rabies Management Program works with State cooperators to contain specific strains of the rabies virus in raccoons, coyotes, and gray foxes. In FY 2007, the Agency distributed 11,766,144 oral rabies vaccination (ORV) baits in 17 States. The number of baits distributed to control specific rabies virus variants by target species was: raccoon, 8,344,797; gray fox, 2,691,093; coyote, 729,888; and feral dog, 366. The Agency baited a total of 241,350 square kilometers, nearly twice as many as last year. In FY 2007, there were no new outbreaks of raccoon or canine rabies. However, there were 2 outbreaks of gray fox rabies, one beyond an ORV barrier and one where no barrier was in place.

APHIS continues to develop methods to control rabies. National Wildlife Research Center scientists have developed a dye marker for ORV baits to evaluate raccoons for the rate of bait exposure. Rhodamine B appears to be a safe and effective biomarker that may reduce the need for invasive sampling techniques to assess the success of the ORV program. The chemical dye, when ingested, stains the oral cavity and is absorbed systemically into growing tissues such as hair and whiskers producing fluorescent orange bands under ultraviolet light. Once NWRC scientists validate the method, it can reduce the costs of monitoring bait exposure to target animals, and ultimately increase the cost-effectiveness of the wildlife rabies vaccination program.

## 20. Witchweed

APHIS works with State cooperators in North and South Carolina to eradicate witchweed and reduce its threat to the \$26 billion corn and sorghum crop in the United States. If witchweed spread throughout the Corn Belt, crop yields for corn and sorghum would decrease by ten percent. The program prevents U.S. commodities from facing restrictions in the global marketplace by reducing the threat posed by the disease. The program's primary performance measure tracks acres infested. In FY 2007, infested acreage was reduced by 21 percent from 2,558 at the end of FY 2006 to 2,015 acres by the end of FY 2007.

## ANIMAL WELFARE

Current Activities: The program activities under this component ensure the humane care and treatment of animals covered under the Animal Welfare Act (AWA) and the Horse Protection Act (HPA) of 1970 as amended. Under this legislation first enacted in 1966 and amended several times thereafter, APHIS carries out activities designed to ensure the humane care and handling of animals used in research, exhibition, the wholesale pet trade, or transported in commerce. APHIS places primary emphasis on inspection of facilities, records, investigation of complaints, inspection of problem facilities, and training of inspectors. Regulations supporting the AWA, which appear in 9 CFR, Chapter 1, Subchapter A, Parts 1-3, provide minimum standards for the handling, housing, feeding, transportation, sanitation, ventilation, shelter from inclement weather, and veterinary care of regulated animals.

APHIS performs pre-licensing inspections because, according to statute, applicants must be in full compliance with AWA regulations and standards prior to an issuance of license. After APHIS issues a license, program personnel perform unannounced compliance inspections and inspections to verify continued compliance. All registered research facilities, by law, are inspected at least once a year. If violations discovered during a compliance inspection remain uncorrected at the time of the inspections process, these violations are documented on the inspection report.

APHIS also administers the HPA as amended, which prohibits the showing, sale, auction, exhibition, or transport of sore horses. Sponsors and/or management of shows, sales, auctions and exhibitions have statutory responsibility under the HPA to prevent unfair competition, and must identify and disqualify sore horses.

### Selected Examples of Recent Progress:

#### 1. Animal Welfare

APHIS continues to focus on conducting quality inspections under the Animal Welfare Act (AWA) at USDA licensed and registered facilities. The program's risk-based inspection system concentrates activities on facilities where animal welfare concerns are the greatest. After APHIS issues a license, program personnel perform unannounced compliance inspections and inspections to verify continued compliance. By law, all registered research facilities are inspected at least once a year. If violations discovered during a compliance inspection remain uncorrected at the time of the inspections process, these violations are documented on the inspection report. During FY 2007, the program conducted 18,343 inspections of licensees, registrants, and prospective applicants, a slight decrease from the 18,600 inspection conducted in FY 2006. APHIS performs pre-licensing inspections because, according to statute, applicants must be in full compliance with AWA regulations and standards prior to issuing a license. In an important case resulting from the enforcement of the AWA, the Hawthorn Corporation paid a \$200,000 fine and agreed to donate their entire 18 elephant herd to other facilities to settle outstanding violations under the AWA.

APHIS reassessed the Animal Welfare programs under the Program Assessment Rating Tool (PART) and received a score of moderately effective. Upon the completion of Office of Management of Budget's (OMB) review of Animal Welfare's PART submission, the program specific findings included: the program has a clearly stated purpose, which is to protect and promote the welfare of animals covered by the Animal Welfare Act (AWA) and the Horse Protection Act (HPA), and is the only program that has authority over the interstate movement of animals that are subject to the AWA; the program issues regulations that include impact and cost benefit analyses, as well as discussions of alternative approaches.

APHIS worked with OMB to develop several new performance measures through the PART process to help the program continue their efforts of ensuring the humane treatment of animals covered under the AWA and HPA. These new measures include: percentage of facilities in substantial compliance of the AWA, percent of stakeholders who find outreach activities useful, percent of licensees and registrants with significant repeat violations of the AWA, percent of repeat violators reinspected for compliance of the AWA within the prescribed timeframe to ensure the humane treatment of animals, and, the average cost of issuing licenses and registrations. In FY 2007, the program achieved a 97 percent rate of substantial compliance with the AWA, a 22 percent increase over the program's goal. Also in FY 2007, the program exceeded their goal by 5 percent of having 70 percent of stakeholders finding outreach activities useful to the program. The program also exceeded their goal of having 8 percent of licensees and registrants with significant repeat violations of the AWA, by only having 2.5 percent having significant repeat violations. The program did not meet their estimates for 80 percent of repeat violators reinspected for compliance of the AWA within the prescribed timeframe. Only 60 percent of repeat violators were reinspected in FY 2007. APHIS is currently working to validate the baseline data for these measures to ensure that the goals are both achievable and ambitious.

The Animal Welfare program is involved in the Agency's Avian Influenza surveillance and monitoring plan, both in its area of program delivery, as well as serving as liaison with the regulated zoo community to aid in the development of avian surveillance plans. In the zoos, the program has also taken the lead in evaluating the data and equipment. The program is also working with Agency partners to conduct field tests of a new proposed mass depopulation methodology for poultry involving fire fighting foam. In FY 2007, APHIS personnel have been involved in training and information meetings within the United States and around the world (Verona, Italy, and Indonesia) regarding the monitoring and control of HPAI and possible responses to a potentially pandemic situation.

APHIS continued to emphasize public education and outreach through efforts which consisted of conducting canine care workshops around the country. Commercial breeders were the target audience for the workshops. Topics included veterinary care, kennel design and maintenance, and nutrition. The Animal Welfare program also participated as panel members at Institutional Animal Care and Use Committee meetings, and hosted State and Federal meetings of animal care officials. In 2007, APHIS sponsored several canine care workshops at various locations throughout the United States for the benefit of commercial dog dealers. In addition, the program hosted several informational meetings addressing the issues on AWA licensure and requirements. The program continued to hold listening sessions and public meetings regarding the Horse Protection Act.

## 2. Horse Protection

APHIS continues to enforce the Horse Protection Act (HPA) of 1970 by prohibiting horses subjected to a cruel and abusive practice, called soring, from participating in shows, sales, exhibitions or auctions. Soring is a technique in which a trainer would irritate or blister a horse's forelegs through the injection or application of chemicals or mechanical irritants; the technique is used by horse owners and trainers to gain a competitive edge and improve their chances to win at shows.

APHIS held a training session in February 2007 for enforcement of the HPA in Tennessee. This session provided attendees a review of horse anatomy and physiology, the Horse Protection Act and regulations, and the responsibilities of the inspectors. This session also demonstrated the correct method to inspect a

horse and provided the inspectors the opportunity to do actual inspections and identify violations on live horses. Each horse industry organization (HIO) in Tennessee was encouraged to send their designated qualified persons (DQPs). DQPs are USDA accredited veterinarians with equine experience, or they are farriers, horse trainers, or other knowledgeable horsemen who have been formally trained and licensed by USDA certified horse industry organizations or associations. Participation by APHIS personnel in the Horse Protection program is still limited to those Animal Care Inspectors and Veterinary Medical Officers (VMOs) that volunteer for such duty, reducing training costs and availing more money for direct enforcement of the Act.

In February 2007, APHIS implemented the Horse Protection Operating Plan for the 2007-2009 show seasons. This plan properly identifies horses that have been sored, and applies the appropriate penalties for these actions. Also, the occurrence of "Conflict Resolution" cases in which there are differences in the inspection findings of a DQP and a VMO, was slightly higher than the all time low numbers seen in 2005. Additionally, outreach efforts in FY 2007 include participation in industry meetings, monitoring of HIO appeals procedures, and participation in professional organization events.

APHIS personnel again attended the Tennessee Walking Horse breed's biggest show, the Tennessee Walking Horse National Celebration in August/September 2007. Out of 3,257 horses entered, there were 127 entries disqualified from competition due to violations of the HPA regulations. The violation rate in FY 2007 was 4.02 percent, compared to 9.73 percent in 2006, 7.11 percent in 2005, 5.55 percent in 2004, and 4.36 percent in 2003. This significant decline in the violation rate for 2007, combined with the new algometers used to determine the rate of foreign substance usage in horses, confirms that significant improvements have been made in enforcement strategies to protect horses from soring.

### SCIENTIFIC AND TECHNICAL SERVICES

Current Activities: The programs within this component ensure the effectiveness of the technology and protocols used in APHIS programs. APHIS conducts these programs to: develop new or improved methods for managing wildlife damage to crops, livestock, natural resources, property, and public health and safety; develop and evaluate quarantine treatments for trade commodities; deal with foreign animal diseases and bioterrorism threats which endanger animal agriculture and the food supply in the United States; control or eradicate harmful plant pests; facilitate global agricultural trade; ensure that new products produced using biotechnology are safe for agriculture and the environment; and, apply new technology to protect the health and marketability of animals and animal products. The Agency also conducts laboratory testing programs to support disease and pest control and/or eradication programs. APHIS maintains a central laboratory that is internationally recognized as the national reference laboratory for all animal diseases. Additionally, APHIS provides advice and assistance to agency programs on environmental compliance requirements with respect to pesticide registration and drug approvals for products used in implementing these programs.

#### Selected Examples of Recent Progress:

##### 1. APHIS Information Technology and Infrastructure

The APHIS Information Technology Infrastructure (AITI) program is comprised of the hardware, software and telecommunications infrastructure that provides APHIS employees with e-mail and office automation tools, Internet access, and access to mission critical programs and administrative applications. AITI is the key technology enabler that supports APHIS mission critical programs and administrative applications.

Program objectives and priorities are to improve sharing of information across the Agency; improve coordination and accessibility of information, processes, and resources available to assist programs in emergencies; improve APHIS' cybersecurity posture; and provide the means to take advantage of E-Gov

initiatives as issued in the President's Management Agenda. The Agency's information technology infrastructure is maintained, enhanced, and operated to support these objectives.

The following are accomplishments in support of these objectives:

**Critical Infrastructure Redundancy:** APHIS has begun the process of providing a highly-redundant infrastructure for key mission-critical IT services. This process has been completed for the enterprise Oracle infrastructure and is underway for e-mail and web access with completion expected in FY 2008. AITI has supported this initiative by funding the additional hardware and software components that are needed to provide this service.

**APHIS Cybersecurity Improvements:** APHIS undertook a comprehensive Certification and Accreditation initiative in support of OMB direction, and USDA's goal to have 100 percent of systems accredited in FY 2006 and beyond. In FY 2007, AITI enabled APHIS to certify and accredit numerous program specific investment and applications by leveraging the work performed on the general support systems in FY 2006; eliminating threats and vulnerabilities by preventing viruses, worms, operating system/applications software weaknesses; and, managing undesirable activities that have an impact on the productivity and efficiency of our employees. APHIS stopped over 600 million intrusion attempts and removed over thirty-one million e-mail spam messages in 2007.

**Telecommunications Consolidation:** APHIS consolidated management and billing of all data circuits in FY 2007. This effort has improved connectivity for over 100 office sites, reduced billing complexity and overhead, and better situates APHIS for the transition to the Networx contract in FY 2008/2009.

**Help Desk Management:** APHIS reduced the number of internal IT help desks from 37 to 31 in FY 2007. This effort has improved user support by providing more centralized services, reducing support staff and telecommunications costs and allowing for improved problem tracking and resolution. In addition, this positions APHIS to implement improved service management tools in FY 2008.

**Emergency Response Support:** APHIS has improved the security, reliability, and robustness of its network. This is critical in an emergency because it allows APHIS to direct critical program operations effectively. The APHIS Continuity Of Operations Centers utilize the telephonic capabilities described previously to support responses to new emergencies by providing information to the public and employees.

**Web Presence Improvements / Web Migration Project:** APHIS has improved the delivery of information across the Internet and Intranet making it easier for our external and internal customers to locate current information expeditiously. The public-facing Internet has been completely converted to the USDA "look and feel" standards with information arranged by topic rather than along organizational lines. APHIS, working with the Enterprise Shared Services staff at the Office of the Chief Information Officer's National Information Technology Center (NITC), has also built the Stellent environment at NITC in Kansas City. The environment is being used to migrate web content into the Stellent Web Content Management system. This will allow for better sharing and management of web content across USDA. The Google search engine has also been implemented to improve search capabilities for our customers. In addition, the APHIS Intranet has been redesigned and converted to the "look and feel" standards. Rollout of the Intranet redesign began in November 2007.

Project Management Office: During 2007 APHIS established a Project Management Office (PMO) within the Information Technology Division. The PMO will standardize tools and processes used to manage IT projects in the Agency with a goal of improving IT project delivery in support of APHIS' mission.

## 2. Biosecurity

The biosecurity program is intended to prevent the intentional introduction of biologically harmful pests and diseases that affect American agriculture. The U.S. agricultural production, processing, and marketing systems are highly vulnerable to deliberate incursions, directly affecting the abundance and safety of the U.S. food supply. APHIS assists in the preparation for agricultural emergency response and will continue to improve APHIS' homeland security related activities including the preparation, planning, and consequence management of potential terrorist threats to agriculture.

The program continued incorporating the Forest Service's Resource Ordering and Status System (ROSS) for Agency use. This system automates the inventory of people and their skills and tracks APHIS resources deployed during emergency response. Further, APHIS adopted a Food Safety and Inspection Service initiative (called the Non-Routine Incident Management System) and modified the incident management and coordination system for use at APHIS headquarters. The system provides APHIS leadership with pertinent agricultural information and task management capabilities.

APHIS, in joint effort with the Environmental Protection Agency and the Technical Support Working Group, initiated an agricultural biomass disposal project. This project proposes to design and build a mobile system capable of destroying contaminated biomass material such as poultry, hogs or cattle that are a potential disease risk. The system is intended to be self-sufficient and able to travel to the site where the problem exists to eliminate the need for off-site transport of the risk material.

## 3. Biotechnology Regulatory Services (BRS)

APHIS has successfully regulated the biotechnology industry for almost 20 years. During that time, the Agency has authorized more than 15,000 field tests involving genetically engineered (GE) organisms without any known impacts on human health or significant environmental harm, and has evaluated more than 90 petitions for deregulation to ensure these plants posed no threat to other plants or the environment. As of September 30, 2007, APHIS has granted 73 petitions for deregulation for the following crops: plums, tomatoes, squash, cotton, soybeans, rapeseed, potatoes, papayas, beets, rice, flax, tobacco, sugar beet, alfalfa, red hearted chicory, and corn. The following paragraphs contain selected examples of recent program progress.

### Proposed Regulatory Changes

As part of the evaluation of its regulatory activities, the program published a draft Environmental Impact Statement (EIS). The draft EIS is a crucial step in the regulatory revision process. The draft EIS evaluates the environmental impacts of the current regulations and the potential environmental effects of the revisions under consideration. The EIS process provides a detailed analysis of the regulatory alternatives that APHIS is considering and allows for public input and comment. The National Environmental Policy Act (NEPA) guides Federal agencies on the integration of environmental and public considerations into their decision making processes. Throughout the EIS development, APHIS is ensuring that all NEPA requirements are followed, ensuring that the environmental impacts of proposed actions and reasonable alternatives are considered. APHIS expects the regulatory revisions to be effective in early 2009.

### Low Level Presence Policy Statement

The program published a policy statement in the *Federal Register* responding to low levels of regulated GE plant materials in commercial seeds and grain. Low-level presence (LLP) is a term used to describe the intermittent, low-level presence of biotechnology-derived gene products in food, feed or seed that have not completed all applicable regulatory reviews. The policy clarifies the existing approach for handling situations in which regulated GE plant material becomes mixed at low levels with commercial seeds and grain. When an LLP incident occurs, the Agency's policy is to respond with actions appropriate to the level of risk, determined by a scientific assessment and warranted by the facts in each case. APHIS will initiate an inquiry whenever regulated material is mixed with commercial seeds or grain to evaluate any risk, to determine the circumstances surrounding the release and to determine whether remedial and/or enforcement actions may be appropriate. In cases in which APHIS determines that remedial action is not necessary to mitigate LLP of regulated GE plant material to protect plant health and the environment, APHIS is not precluded from taking enforcement action against a company or individual for violations of APHIS regulations.

#### Compliance Oversight and Information Technology Systems

In FY 2007, the program conducted 228 inspections of permitted sites and 249 inspections of sites under notification, for a total of 477 inspections. The program evaluated 103 potential noncompliance incidents and issued 36 guidance letters. In FY 2007, two significant cases were referred to the Agency's Investigative and Enforcement Services program for further investigation.

In September 2007, APHIS announced plans for its new Biotechnology Quality Management System (BQMS), a voluntary compliance assistance program to help biotechnology researchers and companies to develop plans and practices to comply with biotechnology regulatory requirements. The goal of the voluntary program is to assist universities, producers, and companies, who introduce GE organisms, to analyze their operations, identify control points where problems could occur, and apply mitigation measures to address those vulnerabilities. In order to address the specific needs of participants, BQMS will consist of two program levels, based on domestically and internationally recognized quality management systems. APHIS anticipates that initial implementation will begin in the spring of 2008 through a pilot development program to collect benchmark data and continually improve the BQMS into an efficient and effective compliance assistance service. Full implementation with industry participation is expected in FY 2009.

In FY 2007, APHIS continued to see process improvements and realize efficiencies within the APHIS ePermits System. In this system, applicants can submit permit and notification applications via the ePermits web interface. State regulatory officials were given access to the ePermits System in October 2006 to review pending applications. With the completion of notifications, permits, and the State review modules in ePermits, the front-end processing for all BRS applications is handled through ePermits. This system has allowed APHIS to accomplish its mission of ensuring the safe research, release, and movement of agricultural biotech events in a more efficient manner. In FY 2008, APHIS expects to expand ePermits System to include additional reporting capabilities and inspection data.

*Conclusion of Significant Investigations*

APHIS completed the investigation of genetically engineered rice in commercial long-grain rice. The investigation focused on the unintentional release of trace amounts of regulated genetically engineered rice detected in two commercial varieties of long-grain rice. The investigation was initiated in August 2006, after Bayer CropScience reported that regulated LLRICE601 had been detected in the long-grain rice variety Cheniere. LLRICE601, which is similar to two previously deregulated lines, was subsequently deregulated in November 2006. The investigation was expanded on February 16, 2007 to include the discovery of regulated genetically engineered rice, later identified as LLRICE604, in the long-grain rice variety Clearfield 131 (CL131).

APHIS officials tested 396 samples from 57 rice varieties that had been harvested between 2002 and 2006 and as a result of the sampling; investigators were able to determine that the presence of LLRICE601 was limited to Cheniere and that the presence of LLRICE604 was limited to CL131. In both cases, only trace amounts of GE material were present. No short- or medium-grain rice varieties that were tested were positive for either LLRICE601 or LLRICE604. APHIS issued a final investigation report in October 2007.

Investigators had hoped to identify how each GE rice line entered the commercial rice supply, but the exact mechanism for introduction could not be determined in either instance. Based upon the findings of the investigation, APHIS will not be pursuing enforcement against Bayer CropScience. Given the lack of available information and evidence, USDA was unable to make any definitive determinations that could have resulted in enforcement action. In addition to the final investigation report, APHIS prepared a lessons learned document, entitled, "Biotechnology Lessons Learned Framework and Revisions under Construction for APHIS" and a summary report and posted these documents on the agency's website.

APHIS completed the investigation of GE creeping bentgrass. The investigation focused on the unintentional release of GE creeping bentgrass into the environment. The investigation was initiated in 2005, after Agency inspection results and the Scotts Company, LLC, self-reported several incidences. Based upon the findings of the investigation, APHIS decided to pursue enforcement action against the Scotts Company. In November 2007, APHIS entered into a settlement agreement with the Scotts Company. Under the agreement, the Scotts Company agreed to pay a significant civil penalty and to conduct three public workshops within one year to present best management practices and technical guidance for other potential developers of GE plants, and all other interested parties, on the identification and prompt resolution of biotechnology compliance incidents.

#### 4. Environmental Compliance

APHIS' Environmental Compliance program provides support to APHIS programs in order to help them comply with various environmental laws, regulations, and executive orders. Primarily, the focus is on compliance with the National Environmental Policy Act (NEPA), the Endangered Species Act (ESA) and the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA).

The Environmental Compliance program also supports the furtherance of a strong environmental ethic within APHIS by: contributing sound, cost-effective environmental policy guidance; providing clear options through which environmental initiatives can be pursued economically and efficiently; and, anticipating, whenever possible, Agency needs relative to its environmental responsibilities and recommending cost effective means through which those needs may be met.

Before implementing any action or activity, a Federal agency must consider the need for preparing an environmental document, either an environmental impact statement (EIS) or an environmental assessment (EA).

During FY 2007, APHIS has made substantial progress in updating its NEPA implementation procedures. The amendments to the implementation procedures improve the clarity and effectiveness of the regulations. Specifically, the revisions explain the documentation required for the three classes of Agency action defined in NEPA. A draft rule is expected to be published in the *Federal Register* by December 2007 with a final rule expected by June 2008.

APHIS prepares an EIS when an action or a program has the potential to significantly impact the environment. During FY 2007, APHIS completed three EISs and made substantial progress in completing an additional EIS. The following are examples of progress made:

**Importation of Solid Wood Packing Material:** A draft Supplement to the final Environmental Impact Statement (SEIS) for this program action was completed in the second quarter of FY 2007. APHIS received a minimal number of comments on this draft and the document will be finalized in the first quarter of FY 2008. The SEIS was prepared in response to a lawsuit that, among other things, challenged APHIS' estimates of the quantities of methyl bromide used worldwide to fumigate solid wood packing material.

**Gypsy Moth Supplemental EIS:** A draft SEIS, prepared in cooperation with the U.S. Forest Service, was finalized and approved for printing by the Forest Service during the fourth quarter of FY 2007.

During FY 2007, APHIS completed 73 EAs. These documents do not require the in-depth analysis that an EIS requires because they are prepared for proposed actions that are not expected to result in significant impacts and are not as broad in scope as an EIS. However, APHIS prepares an EA to analyze the potential for environmental impacts of a proposed action that generally are classified in the EA category under APHIS NEPA implementing regulations (7 CFR 372.5).

Examples of EAs prepared during FY 2007 include the following:

**Potato Cyst Nematode in Idaho:** APHIS prepared an EA and Finding of No Significant Impact (FONSI) for the eradication of potato cyst nematode from potato fields outside Shelley, Idaho. The eradication program will last for several years and will consist of chemical treatments occurring in the spring and fall of each year until the potato cyst nematode is no longer detected. A revised EA was completed to analyze potential impacts of more frequent treatments at higher application rates.

Importation of Certain Additional Commodities from bovine spongiform encephalopathy (BSE) Minimal-risk Regions: APHIS prepared an EA and FONSI in support of a rulemaking to amend regulations to allow additional commodities from regions that meet the definition of a BSE minimal-risk region (MRR). Currently, Canada is the only country that meets the requirements of a MRR according to the MRR regulation implemented in January 2005.

Before implementing a proposed action, APHIS must carefully consider the potential for any effects to listed threatened or endangered species or their habitats, as required by the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.). Once the potential for effects has been established, APHIS must consult with the U.S. Fish and Wildlife Service and/or the National Marine Fisheries Service to determine the most appropriate means of minimizing these effects.

Emerald ash borer biocontrol: APHIS prepared a biological assessment (BA) that analyzed the impacts of the release of 3 nonindigenous biocontrol agents (wasps) into the continental United States against the emerald ash borer. APHIS submitted the BA to the U.S. Fish and Wildlife Service (USFWS) and they concurred that the releases of these wasps would have no effect on federally-listed threatened or endangered species.

Light Brown Apple Moth Eradication Program in California: APHIS provided technical assistance to staff within the California Department of Food and Agriculture on assessing the potential impacts on federally listed species related to its plans to eradicate the light brown apple moth.

In accordance with the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) and the Federal Food, Drug, and Cosmetic Act (FFDCA), APHIS obtains and maintains pesticide registrations (working with the U.S. Environmental Protection Agency) and drug approvals (working with the U.S. Food and Drug Administration) for products used in many APHIS programs.

The program provides the following services to other Agency programs: identifies products that are less harmful to the environment than conventional pesticides; obtains pesticide and drug use approvals from Environmental Protection Agency and Food and Drug Administration using the most efficient and timely approaches; and, serves as a liaison to pesticide manufacturers to obtain label and use amendments

Some examples of APHIS FIFRA and FFDCA actions are as follows:

GonaCon Experimental Use Permit Application: APHIS prepared and submitted an application to the EPA for an experimental use permit (EUP) to study the GonaCon immunocontraceptive vaccine on elk. The effectiveness of the vaccine in reducing reproduction by female elk under field conditions will be tested in the Rocky Mountain National Park, Colorado beginning in January 2008. APHIS also prepared and submitted an application for an EUP for testing the effectiveness of the immunocontraceptive on deer at the Point Reyes National Seashore Park in California, which was subsequently approved by EPA.

Light Brown Apple Moth in California: APHIS secured approval from the EPA for a Federal Quarantine Exemption permitting the use of the LBAM mating disruption pheromone in California. The product is disbursed through a dispenser tied around the branches of trees. EPA also approved requests for aerial or ground applications of two unregistered mating disruption products over residential and municipal areas, forests, parks, recreational areas, non-crop areas, nurseries, orchards and all other agricultural crops in all counties where LBAM has been detected.

##### 5. Physical Operational Security

APHIS oversees and implements precautionary measures to ensure continued, efficient operation; protection from disruption, degradation or destruction; and, timely restoration of its facilities. APHIS

works with the Department of Justice, the Federal Protective Service, and the Department of Homeland Security and local law enforcement to ensure that the appropriate agency takes the lead, cost-shares, and integrates security in co-locations.

In addition, APHIS security activities include high security for the Pocatello Supply Depot, weapons and explosives security, national identification and access control program-enterprise, compliance and oversight review, entomology protection, guard service management, security awareness training, threat reduction response program, workplace violence prevention, and Homeland Security Presidential Directives (HSPD) implementation program.

During FY 2007, APHIS continued to increase security at our mission critical facilities including the new Research Building, a new Biological Safety Level 3 (BSL-3) space, and a bison quarantine facility. Guidelines for security for BSL-3 environments are specified by USDA guidelines and in are in compliance with Homeland Security Presidential Directives. APHIS also initiated and tested the new access program to issue and use the Federal Identity Smart Card under HSPD-12.

#### Physical Security

The security program has been very aggressive and diligent in implementing security equal to or above the Federal standard. The following outlines the security measures implemented during FY 2007:

- Completed physical security upgrades of 20 State and District Office facilities;

- Completed annual aviation reviews of 30 aircraft and hanger facilities;

- Installed countermeasures including CCTV, access control, intrusion detection, fencing, lighting, safes/vehicle alarms and other countermeasures at 60 APHIS facilities/program locations/assets;

- Reviewed and fine tuned guard service at 17 critical and secondary facilities;

- Procured 1,000 HSPD-12 compliant access control readers for APHIS facilities to use the Smart Card;

- Added 15 facilities to the National Access Control Enterprise. The system includes national identification/access cards of approximately 11,000 cardholders 1,000 card readers, over 1,600 alarm points, and approximately 250 cameras;

- Responded to over 20 threats to APHIS personnel or Work Place Violence allegations;

- Protected APHIS personnel at 20 Horse Shows under the Horse Protection Act;
- Conducted workplace violence training at 30 locations and educated over 1,000 personnel;

- Exceeded U.S. Nuclear Regulatory Commission standards for access control and securing APHIS self contained irradiators, and collaborated with the Department of Energy to put the same nuclear monitoring equipment used in Iran and North Korea in APHIS irradiators to protect our nuclear material; and,

- Reviewed and designed security for eight new construction projects.

Homeland Security Supplemental Presidential Directive/HSPD-12

HSPD-12 mandates a consolidated Human Resources/Information Technology/Security effort in order to identity-proof all new APHIS employees and contractors. APHIS designed and implemented a program that will ensure all personnel have background investigations and are cleared prior to receiving their APHIS badge. Toward that end, during FY 2007 APHIS:

Provided USDA with the APHIS Security System to use as the system-based physical and logical access system. APHIS complete a successful trial and was the first Federal Agency to have implemented the Federal ID card to work in all APHIS facilities;

Provided USDA with expertise and personnel to develop the USDA Departmental response and solution to the mandates of the requirement;

Established 8 enrollment stations to enroll and identity-proof all APHIS personnel. APHIS has ordered 10 portable systems to enroll all field employees; and,

Collaborated with the General Services Administration, and other USDA agencies to deploy the Smart Card system.

#### 6. Plant Methods Development Labs

The Plant Methods Development Laboratories' program goal is to provide advanced scientific and technological capabilities to protect and improve our nation's plant resources in agriculture and the environment. The program is carried out at APHIS' Center for Plant Health Science and Technology (CPHST), which consists of seven laboratories located throughout the United States. Plant Methods laboratories support APHIS' plant health programs and emergency response capabilities by ensuring that accurate tools are available to detect, identify, and diagnose plant pathogens, insect pests, and weeds. Plant Methods laboratories also develop and evaluate quarantine treatments for commodities of trade. Additionally, the program evaluates biological control organisms and new biological and chemical materials; adapts or invents equipment for specific pest projects; conducts pathway and pest risk analysis; provides technical consultation and training for Agency personnel and their State and university cooperators; and serves as a liaison between APHIS and the research community.

#### Pest Exclusion and Detection Technology

To carry out its goal of safeguarding U.S. agricultural resources, APHIS needs the appropriate technological tools. The program aims to develop new or improve existing tools each year to enhance APHIS' safeguarding capabilities. The program reached its FY 2007 annual performance target by developing or improving five quarantine treatments for commodities of trade. The program developed new treatment schedules for a variety of imported commodities, including carambola, litchi, longan and Sand pear. Various commodities were added to existing treatment schedules in the cold treatment and methyl bromide series. The program improved several treatment schedules with the addition of more defined pest lists. The irradiation series was re-worked to reflect the use of generic doses based on the pest of concern, and the wood packing material schedule was modified to align with the International Standards for Phytosanitary Measures (ISPM)-15.

Over the past year, the Agency initiated an agenda to establish an irradiation treatment program to supplement, and potentially replace, other treatment options that are deleterious to the environment or fruit quality. Allowing irradiation as a pest mitigation option required developing regulatory protocols, treatment dosages, certification standards, treatment tracking and reporting procedures. In FY 2007, the program certified the KRUSHAK irradiation research facility for treatment of mangoes in Lasalgaon, India, the first foreign irradiation facility approved to treat fruit to be shipped to the United States. Plant Methods laboratories guided much of the policy development by validating treatment data, including the use of

generic doses based on pests of concern. Plant Methods staff served as scientific advisors in developing the generic operational work plan that regulates the use of irradiation in preclearance programs. The basics developed for this initiative have served to launch the Agency's irradiation program, and will result in the continued utilization of this technology by APHIS and external stakeholders.

The Plant Methods program continues to develop and deliver lucid identification tools for APHIS to support domestic, port, and offshore pest identification needs. Lucid identification tools are electronic based keys used to identify snails, insects, weed, and other organisms of interest. This year, several keys were released, including one for *Scale Insects: Identification Tools for Species of Quarantine Significance*, and the program is developing a Lucid key to *Pacific Invasive Ants* through a cooperative agreement with the University of California at Davis. In FY 2007, APHIS conducted a total of ten Lucid workshops at six locations, in response to requests from Plant Inspection Stations and others to provide instruction and hands-on practice in the use of Lucid keys.

#### Emergency Response

The Plant Methods Program supports APHIS' emergency response efforts by ensuring that accurate diagnostic tools are available for use in responding to outbreaks of serious plant diseases and pests, such as light brown apple moth (LBAM), which was detected for the first time in the United States in March 2007. In response, Plant Methods Development Laboratories developed survey measures as well as eradication and control plans, to assist the LBAM emergency program. In FY 2007 Plant Methods also provided support for several high priority programs, including panicle rice mite, gladiolus rust, *Phytophthora ramorum*, and potato cyst nematode.

The Plant Methods program assisted in the formation of the Citrus Health Response Plan. The plan is designed to protect citrus production in the United States through harmonized standards for use across the states. A technical working group convened to review, define, and identify conditions under which nursery stock, intended for shipment to non-citrus producing states, can be produced and shipped with minimal risk of movement of citrus canker, citrus greening, or Asian citrus psyllid.

#### Sterile Insect Technology (SIT)

Several APHIS programs release sterile insects to help control or eradicate targeted pest populations. The sterile insects distributed by APHIS mate with wild insects and prevent wild insects from producing viable offspring. In FY 2007, Plant Methods scientists continued to develop new SIT for the pink bollworm program with the use of genetically modified insects to increase effectiveness of the sterile release program. The use of genetically modified insects will allow the lowering, or elimination, of radiation to induce sterility, which will improve sterile insect performance and also allow improvements in program monitoring. The program conducted a large scale field demonstration of several lines of genetically modified moths in FY 2007 and tested these strains in mass-rearing to compare their performance with the standard irradiated strain of sterile moths. APHIS is currently preparing an environmental impact statement on the possible implementation of genetic engineering for improved SIT for both pink bollworm and fruit fly programs. Further evaluation and environmental documentation will enable this technology transfer to begin in 2008 and allow for program delivery in FY 2009.

#### Biosurveillance

Biosurveillance is the systematic collection and analysis of pest occurrences from online and open source resources. CPHST and North Carolina State University are cooperating on a biosurveillance project called Exotic Pest Information Collection and Analysis (EPICA), which was initiated in 2005. EPICA utilizes web-searching technologies to identify, compile and archive, filter, evaluate, and report information pertaining to new quarantine pest situations globally. EPICA became fully operational in 2007; reports are distributed biweekly via email to program managers who can apply the information to better safeguard the United States.

### Risk Mapping

CPHST and North Carolina State University developed the North Carolina State University APHIS Plant Pest Forecast System (NAPPPFAST). In FY 2007, this was combined with Geographic Information Systems technology to improve pest detection by generating standardized pest risk maps. As a result, NAPPPFAST has been updated to include global daily datasets. These global datasets have application in climate matching, model validation, and intercepting hitchhiking pests arriving on overseas shipments.

In FY 2007, the program utilized NAPPPFAST to develop pest risk maps based on climate and host distribution for the top 50 prioritized pests on the Cooperative Agricultural Pest Survey (CAPS) program pest list. The CAPS Top 50 Pest Risk Maps depict areas of the United States that may be at higher risk for pest establishment, based on host availability and pest biology. The combination of the host information and biology in a standardized manner allows the end user (i.e., state survey coordinator) to more easily determine the pests of survey priority and where to focus survey resources.

### 7. Veterinary Biologics

APHIS' Center for Veterinary Biologics (CVB) regulates veterinary biological products (vaccines, bacterins, antisera, diagnostic test kits, and analogous products) available for the diagnosis, prevention, and treatment of animal diseases to ensure that these products are pure, safe, potent and effective. The Center accomplishes its mission through the thorough evaluation of pre-licensing dossiers; testing of products submitted for licensure; facility and product inspections; investigations of non-compliance; and post-marketing surveillance. This comprehensive regulatory approach is the most efficient and effective way to ensure only quality Federally-licensed veterinary biological products are available to U.S. consumers.

In FY 2007, APHIS licensed 63 new products that are critical for protecting American agriculture, facilitating trade, and enhancing agricultural economic opportunities. In addition, APHIS conducted over 3,000 tests on vaccines and diagnostic test kits used in the surveillance and eradication activities of the Agency's programs. As a result, veterinarians and animal owners now have 18 new antigen combination products for the diagnosis, prevention, or treatment of animal diseases. Also, 32 licenses for existing products were issued, of which 19 were for biotechnology-based products. The Agency terminated 238 product licenses at licensee request for obsolete products as compared to 251 in FY 2006.

In FY 2007 there were 2,063 active licensed or permitted products for the control of 212 animal diseases. In addition, APHIS licensed the first Classical Swine Fever reverse transcriptase polymerase chain reaction test kit. APHIS conducted 85 on-site inspections; 36 percent of the inspections were in support of a new establishment or product license for the industry. APHIS performed 83 regulatory actions, issued 30 warning notices, and conducted 53 investigations of possible regulation violations in FY 2007. In addition, the Agency received 380 adverse event reports related to veterinary biological products. APHIS shipped 5,075 vials of reagents, 57 kit panels, and 94 slides to facilitate testing consistency and quality by biologics manufacturers and other regulatory authorities. CVB provided an additional 27,535 vials of reagents within APHIS.

CVB allocated 44 days (per Specialist FTE) for the inspection of licensed and unlicensed biologics manufacturing sites to assure compliance with regulations/standards. Activities were coordinated with the APHIS National Centers for Import and Export (NCIE) and International Service programs because of heightened concerns, most notably Bovine Spongiform Encephalopathies, related to ingredients of ruminant origin in licensed products. Because of Agency vigilance, there were no foreign animal disease events related to the importation of veterinary biological products from approximately 63 million doses.

APHIS provided a variety of services related to the import and export of veterinary biological products. More than 2,600 Certificates of Licensing and Inspection for the export of veterinary biologics were issued. To advance the Center's effectiveness in evaluating the purity and safety of veterinary biologics, CVB

directed the development of an assay for the measurement of tetanus antitoxin in equine serum. The assay has significant application beyond the Center, as it is also being used in diagnostics by APHIS' National Veterinary Services Laboratories.

CVB received a certificate of ISO 9001 Certification from Quality Systems Registrars supporting better business practices. Public recognition of the excellence of the CVB program for regulating veterinary biologics is important in terms of the marketability of the nation's animals, animal products, and veterinary biologics. ISO 9001 requirements set the standards for sound business practices, emphasizing customer service, continual self-assessment, establishment of measurable objectives, personal accountability, and program improvement. Third-party certification of CVB to these ISO 9001 standards provides verification and formal recognition of the achievement of these high standards nationally and internationally. Efforts on materials acquisition, support services, and the establishment of a customer satisfaction survey to assess the needs of veterinary biologics manufacturers led to this achievement.

CVB provided expertise and training at a joint Center/Institute for International Cooperation in Animal Biologics education program. More than 135 delegates from 21 countries participated in this 3-week course aimed at educating foreign officials on U.S. regulatory processes. Relationships established during the course resulted in better understanding of U.S. policy and improved world-wide marketability of U.S. produced biologics. The program also provided expertise in a number of other foreign animal disease seminars and conferences regarding vaccines banks for Foot and Mouth Disease and Rift Valley Fever. In addition, CVB continues to test and monitor the avian influenza vaccine supply to ensure that the more than 140 million doses contracted by the USDA remain potent and effective throughout the product shelf-life.

CVB provided expertise to the Department of Health and Human Services and NCIE personnel to inspect biological manufacturing facilities located in the Czech Republic. APHIS also published regulations for vaccines against emerging infections and agrobioterrorism in the U.S.

#### 8. Veterinary Diagnostics

The National Veterinary Services Laboratories (NVSL) is unique in its functions: serving as the United States' national and international reference laboratory for animal diseases, conducting disease surveillance testing, providing national leadership in coordination and emergency laboratory response, training State and university laboratory personnel, providing proficiency testing, and, developing improved diagnostic technologies. A National Animal Health Laboratory Network (NAHLN) was established to address significant emergent biological and chemical threats, including foreign animal diseases and bioterrorist threats, to animal agriculture and to a secure food supply in the United States. Under the NAHLN business model, the NVSL's diagnostic testing operations will be used primarily for confirmatory testing of samples identified by the NAHLN laboratories as inconclusive.

APHIS and the Cooperative State Research, Education, and Extension Service have established contracts with several State and university diagnostic laboratories to assist with testing and surveillance efforts. As part of the NAHLN network, these contracts incorporate 54 State/university laboratories; the Department of the Interior (DOI) laboratory in Madison, Wisconsin; the Food Safety and Inspection Services laboratory in Athens, Georgia; and, the National Veterinary Services Laboratories in Ames, Iowa and Plum Island, New York, for a total of 58 labs in 45 States. The NAHLN member laboratories are trained and proficiency tested by APHIS on an annual or semi-annual basis. NAHLN laboratories are currently participating in USDA surveillance efforts by performing screening assays and forwarding any suspect or positive samples to the appropriate section of the NVSL for confirmatory testing. The NVSL Diagnostic Virology Laboratory in Ames is the only internationally recognized avian influenza reference laboratory in the United States.

A "Train the Trainer" program has been developed and implemented for foot-and-mouth disease (FMD), classic swine fever (CSF), avian influenza (AI), and exotic Newcastle disease (END) rapid assays. This program has increased the number of State/university laboratories approved to conduct the CSF and FMD

assays from 14 to 34. The program has also increased the number of approved to conduct AI and END testing from 44 to 53, including State/university laboratories and the DOI laboratory. Not only has the program increased the number of laboratory personnel prepared to respond to a national animal health emergency, but it has also provided the United States with a cadre of trainers available to teach others when needed. Successful implementation of this program is a significant step for the network and its mission of ensuring sufficient diagnostic capability and capacity to address an animal health emergency.

To increase the overall diagnostic testing capability of member laboratories, the NAHLN provided high throughput equipment that was distributed to 31 NAHLN laboratories located in highest risk AI states in FY 2007. This technology allows semi-automated processing of diagnostic samples and test methods to enhance the daily testing output of each laboratory. In order to determine the most appropriate placement of the high throughput equipment within NAHLN laboratories, the program requested the assistance of analytical epidemiologists within the USDA and APHIS. This team was able to prepare a risk assessment model to evaluate the risk level of highly pathogenic avian influenza introduction and spread. They also created a prioritized ranking of States based on risk level. Currently, APHIS is validating NAHLN methods for AI, CSF, and FMD using this type of technology.

Surveillance continued for CSF in States with a high risk for introduction, including Puerto Rico. Currently, 34 State/university NAHLN laboratories are testing samples. This coordinated effort initiated surveillance for foreign animal diseases that pose a risk to U.S. animal agriculture. The effort not only provides early detection on an incursion of a foreign animal disease, but also ensures that we have proficient diagnosticians prepared to respond to the large number of samples generated during an outbreak of a foreign animal disease. Confirmatory testing is performed at NVSL's Foreign Animal Disease Diagnostic Laboratory in Plum Island, New York.

The NVSL, as part of its role as a World Organization for Animal Health (OIE) avian reference laboratory, provided training to 47 scientists from 27 countries in various diagnostic techniques for avian influenza. In addition, NVSL scientists traveled to Brazil, Kazakhstan, Tanzania and Mexico to provide in-country training for avian influenza diagnostics. APHIS developed and implemented similar training programs in seven countries for FMD and brucellosis.

As part of the increased surveillance efforts in poultry and wild bird populations in FY 2007, NVSL produced reagents for nearly 3 million avian influenza serologic assays performed by National Poultry Improvement Plan laboratories. In addition, NVSL provided confirmatory testing for avian influenza as part of the joint departmental effort of USDA and DOI to perform surveillance in the wild bird population for highly pathogenic H5N1 virus.

The NVSL achieved accreditation to the ISO 17025 laboratory standard in December 2006. Accreditation to this international standard provides confidence to national and international customers of the quality of test results generated at the NVSL, and it is an important part of NVSL's status as an OIE reference laboratory for a number of diseases of worldwide concern. This accreditation requires a large expenditure of time and resources in order to constantly ensure and document that personnel are properly trained, test procedures are properly validated, and equipment is properly functioning for each of the various individual test methods. The ISO 17025 standard is accepted internationally as the gold standard for quality in laboratory testing, and accreditation to this standard significantly elevates the stature of the NVSL in the international community.

#### 9. Wildlife Services Methods Development

APHIS' National Wildlife Research Center (NWRC) scientists develop methods to improve Agency wildlife activities in three areas: Agriculture and Resource, Invasive Species and Technology Development, and Wildlife Disease Research Programs. The program surpassed its 2007 performance target of testing and/or improving 15 wildlife damage management methods by two.

NWRC's Agriculture and Resource Research Program focuses on reducing wildlife damage to livestock, crops, aquaculture, property and other human activities. At the program's field station in Logan, Utah, scientists evaluated the cost effectiveness of trap monitors. NWRC scientists developed and evaluated trap monitors that notify a trapper via pager. These trap monitors allow Agency specialists to prioritize trap checking, comply with 24-hour trap check State regulations, and reduce operating costs by increasing the efficiency of monitoring efforts. At the Starkville, Mississippi, field station, scientists identified the complete life cycle and vectors for an important catfish parasite, that causes high mortality in catfish fingerlings and the formation of cysts in the fillets of mature catfish, rendering the product unsuitable for sale. NWRC biologists identified and confirmed the first intermediate host, a native snail found in the Mississippi Delta and North Dakota. White pelicans are both a predator of catfish and a vector for the catfish parasite. The information on the parasite's life cycles, host range, and site of infection in the fish host allows scientists to understand the parasite and this information will be used to aid fish farmers and wildlife managers in the development of targeted management plans to control these parasites in commercial and wild fish populations. NWRC scientists at the Bismarck, North Dakota, field station and Fort Collins, Colorado, headquarters developed a bait-take model for estimating blackbird mortality from an APHIS registered pesticide. DRC-1339 is a selective and effective avicide for reducing troublesome populations of blackbirds, starlings, pigeons and other species of birds that cause economic damage at feedlot and dairy operations, and pose a risk for disease transmission to cattle. However, the program needs standardized and reliable techniques to estimate mortality during baiting operations to satisfy requirements of the National Environmental Policy Act. The model provides operational programs with a valuable tool which will improve baiting efficiency, assure regulatory compliance, and provide economic and animal health value to operators of dairies and feedlots.

NWRC's Invasive Species and Technology Development Research Program focuses on risk assessments for invasive species as well as developing wildlife damage management methods. Scientists at the Center's headquarters in Fort Collins, Colorado, developed a probabilistic model for estimating pesticide efficacy and non-target impacts. NWRC scientists have applied this model to a variety of scenarios pertinent to APHIS, including an estimation of effects to non-target avian species potentially exposed to rodenticides in conjunction with control of invasive rodent species and an estimation of the percentage of human population which would exceed Environmental Protection Agency recommended mercury exposure limits via the consumption of fresh water and salt water fish. Scientists at the NWRC headquarters have also developed and field tested an immuno-contraceptive vaccine (GonaCon™) for the control of overabundant urban white-tailed deer. GonaCon™ is a one-injection formulation that is more practical for field delivery to free-ranging wildlife than earlier, two-injection contraceptive agents. In field trials in Maryland and New Jersey, our scientists found that GonaCon™ reduced reproduction of female white-tailed deer over a two year period. This reproductive inhibitory vaccine has the potential to complement other management options of white-tailed deer populations in urbanized areas. NWRC scientists also conducted an economic assessment of a hypothetical translocation of the invasive brown tree snake from the Territory of Guam to the Hawaiian Islands. The total annual projected economic impacts, including the costs of medical treatments, electrical outages, and lost tourism revenue, of the translocation of the invasive brown tree snake to Hawaii would fall within the range of \$473 million to \$1.8 billion. These projections underscore the value of a brown tree snake interdiction and control program on Guam.

NWRC's Wildlife Disease Research Program focuses on wildlife diseases. NWRC scientists at the Kingsville, Texas, field station have analyzed the movement and mating patterns of feral swine to estimate the risk feral swine pose to domestic production. Feral swine transmit some diseases by contact among individuals, including sexual contact. NWRC researchers found that feral swine transmit brucellosis and pseudorabies in the wild. Using genetic paternity methods, NWRC scientists also found a high degree of multiple mating in feral swine, which means higher risks for disease transmission. Finally, NWRC scientists showed that there was a high degree of visitation of feral swine with domestic swine housed in open (shed) operations. These results demonstrate the value of genetic techniques and movement data to provide insight into difficult wildlife management problems and supply timely information for predictions of disease transmission within feral swine and the need for integrated control programs.

## CONTINGENCY FUNDS

### 1. Asian Gypsy Moth

In FY 2007, APHIS released \$885,396 in contingency funds to conduct eradication and follow-up activities for Asian gypsy moth in Idaho, Washington, California, and Oregon. Unlike European gypsy moth, which is established in the eastern United States, Asian gypsy moth is not endemic in this country, but is periodically introduced. It not only has a much broader host range than its European relative, but can spread rapidly because the female is capable of flying 25 miles (unlike the flightless European gypsy moth female). When Asian gypsy moth is detected in the United States, APHIS and affected States respond quickly with delimiting surveys and *Bacillus thuringiensis* (Bt) treatments. To ensure that eradication of spot infestations is successful, APHIS follows eradication treatment with three years of survey trapping. APHIS conducted delimiting and treatment activities in the States listed above in 2007. There were in total, 292,268 acres treated for Asian gypsy moth within the four States.

### 2. Cattle Fever Tick

In FY 2007, APHIS released \$513,266 in contingency funds to address elevated cattle tick infestations within the quarantine zone. The funds were used to aid in carrying out eradication activities necessary to eliminate and limit the spread of the pest. New personnel were not hired, and new horses weren't acquired. Program operations were supported at their current level throughout the end of the fiscal year.

### 3. Contagious Equine Metritis

In FY 2007, APHIS used \$470,579 from its contingency fund to cover costs associated with the control and eradication of an introduction of Contagious Equine Metritis (CEM) that was found in imported horses. These horses were found to be infected prior to their arrival in the United States. Mitigating the impact of CEM requires quarantine of all potentially and exposed animals, complete diagnostics and treatment of affected horses, gathering of any semen collected from infected stallions, and the use of "test" mares to breed with suspect stallions and subsequent diagnostics testing.

Of the \$470,579 requested, APHIS spent \$79,964 on testing, the treatment of infected animals, and other associated costs. APHIS is still in the process of negotiating appraisal costs for indemnity payments, which were estimated at \$378,500.

### 4. European Gypsy Moth

In FY 2007, APHIS released \$874,604 in contingency funds for eradication and/or follow-up survey for six isolated European gypsy moth infestations in FY 2007. Two areas in Ohio and one each in Indiana, Wisconsin, Oregon, and Washington State required treatment. The European gypsy moth is established in the eastern United States, but APHIS works to prevent human-assisted spread of the naturally slow moving pest by eliminating isolated infestations. APHIS treated approximately 2,500 acres in FY 2007 and will conduct enhanced trapping activities in these areas in FY 2008 to ensure that eradication efforts were successful.

### 5. Rabies

In FY 2007, APHIS used \$350,000 to address a rabies emergency in west central Texas after officials reported two outbreaks of gray fox rabies. The Agency used these funds to purchase 280,000 oral rabies vaccination baits to target gray fox and coyotes. Without the additional bait, rabies could have spread at a more rapid rate and containment of rabies would have been difficult and more expensive. The Agency will

continue moving this barrier inward over the next five to six years to eliminate this unique variant of the rabies virus.

#### 6. Viral Hemorrhagic Septicemia (VHS)

On October 24, 2006, APHIS issued a Federal Order (which was subsequently amended on November 14, 2006, and May 4, 2007) to prevent the spread of VHS into aquacultured populations. This Federal Order restricts the movement of 37 species of fish entering into interstate commerce from the eight States bordering the Great Lakes (Illinois, Indiana, Michigan, Minnesota, New York, Ohio, Pennsylvania, and Wisconsin) and from two Canadian provinces (Ontario and Quebec) that have been affected or are at risk of having the disease. APHIS is currently developing an interim rule to replace the Federal Order.

In August 2007, APHIS used \$1.5 million in contingency funding to address VHS. APHIS entered into cooperative agreements with State agencies to conduct surveillance on wild populations in the eight States bordering the Great Lakes, as well as 11 other States bordering those States (Connecticut, Iowa, Kentucky, Maryland, Massachusetts, Missouri, New Jersey, North Dakota, South Dakota, West Virginia, and Vermont). Also APHIS entered into cooperative agreements with State agencies to support compliance activities in the eight States bordering the Great Lakes. APHIS has developed an education and outreach campaign focused on aquaculture facility biosecurity issues and vectors of disease transmission. The intent of this effort is to reduce the spread of the disease through activities that are not easily controlled through regulation. APHIS is expanding the National Veterinary Services Laboratories' capacity in Ames, Iowa, to be able to conduct confirmatory testing and other activities related to VHS activities.

These activities focus on wild fish populations. The decision to conduct surveillance only in wild and not farm-raised fish was made because the disease is currently only known to occur in wild populations, and it is necessary to understand the geographic scope of the disease to develop an effective regulatory program for VHS. The focus of APHIS' regulations continues to be to prevent the pathogen from entering into aquacultured populations.

#### Summary of FY 2007 Contingency Fund Releases

	Activity	FY 2007 Releases from Contingency Fund
1	Asian Gypsy Moth	\$ 885,396
2	Cattle Fever Tick	513,266
3	Contagious Equine Metritis	470,579
4	European Gypsy Moth	874,604
5	Rabies	350,000
6	Viral Hemorrhagic Septicemia	1,500,000
	Total FY 2006 Contingency Transfers	\$ 4,593,845

EMERGENCY ACTIVITIES FUNDED BY TRANSFERS  
FROM COMMODITY CREDIT CORPORATION (CCC)

1. Bovine Spongiform Encephalopathy

From June 1, 2004 through August 2006, APHIS conducted enhanced BSE surveillance efforts and tested more than 750,000 samples at a cost of approximately \$77 million. During this period of time, only three positive cases of BSE were discovered in Texas, Washington State, and Alabama. This one-time effort provided a snapshot of the BSE status of the cattle population in the United States and allowed APHIS to estimate the possible incidence of BSE in the U.S. cattle population.

Following this enhanced surveillance, APHIS released an estimate of the prevalence of BSE in the United States in July 2006. This estimate used data from the previous 7 years of BSE surveillance, and it concluded that the prevalence of BSE in the United States is extremely low, with less than one case per million head of adult cattle. Drawing on the information contained in the prevalence estimate, APHIS has used the same model to determine the level of ongoing surveillance required to continue to detect BSE at the established prevalence rate. APHIS has determined that by conducting an ongoing surveillance program sampling approximately 40,000 animals per year from targeted populations, the Agency will be able to continue to detect BSE at the established prevalence level.

In FY 2007, APHIS continued to implement its ongoing BSE surveillance program by testing 42,935 cattle that were 30-months of age or older for BSE. This achieved the program goal to test approximately 40,000 cattle, 30-months of age or older, annually from the following surveillance stream sources: on-farm; veterinary diagnostic laboratories; public health laboratories; FSIS and State-inspected slaughter facilities; and rendering or 3D/4D facilities. To maximize efficiency and effectiveness, the ongoing BSE surveillance program was designed to target those cattle populations where the disease is most likely to be found. Cattle that are identified as "clinical suspects", whether categorized as such by sample collectors or post-sampling on the basis of the clinical history associated with the animal sampled, are considered to be of the highest value for ongoing surveillance. Therefore, "clinical suspects" were sampled for BSE testing in FY 2007, regardless of the stream through which they were presented to surveillance or the degree to which annual sampling goals had been met.

2. Bovine Tuberculosis

In FY 2007, APHIS carried over approximately four million in Tuberculosis (TB) CCC funds available from a previous transfer. In addition, the Department transferred \$35,094,975 to the Agency, late in the fiscal year, to support TB eradication and enhanced surveillance activities. This transfer includes \$33.1 million in new money available to APHIS from the CCC, and \$2 million was redirected from Exotic Newcastle Disease (END). These funds supported multiple programs including: the continuation of the enhanced TB surveillance effort in Minnesota, which began in FY 2006; the purchase of tuberculin used in enhanced TB surveillance; TB task force activities in New Mexico; and the depopulation of diagnostic animals and affected herds in the Southwest. APHIS has carried forward approximately \$34 million in CCC funds into FY 2008. These funds are committed to depopulating affected herds in New Mexico; continuing the enhanced surveillance program in New Mexico and surrounding areas; supporting enhanced surveillance diagnostic work at the National Veterinary Services Laboratories; and completing the final stages of the enhanced surveillance work in Minnesota that began in FY 2006.

3. Citrus Canker

In FY 2007, APHIS processed all pending claims to compensate eligible citrus growers and nurseries whose trees were destroyed during the Citrus Canker Eradication Program due to infection or exposure to citrus canker bacteria. The total compensation paid totaled \$615,744,802 and involved just over 1,000 claims from 2001 until January 10, 2006, when eradication efforts ceased. Funds for this purpose were

transferred by the Secretary from Section 32 and the Commodity Credit Corporation (CCC). In FY 2007, APHIS received an additional \$100 million in funds transferred from Section 32. Claimants were paid for lost production and future loss of income. To be eligible for payment, grove owners had to have received an Immediate Final Order for tree destruction on or before January 10, 2006.

Payments were processed in the order in which the Immediate Final Orders were issued, and destruction of the trees was verified.

#### 4. Emerald Ash Borer

In FY 2007, APHIS had \$20.4 million in Commodity Credit Corporation (CCC) funding available to address Emerald Ash Borer (EAB). The amount consisted of \$11.3 million in funding redirected from APHIS' existing balances for current needs, and approximately \$8.7 million in carryover funds from the previous year.

Of the available funding, \$7.41 million was used for statewide survey activities in Ohio, Indiana, and Illinois, as well as the Upper Peninsula of Michigan, Prince Georges' County, Maryland, and areas of Virginia. In addition, Pennsylvania is conducting delimiting surveys in response to the FY 2007 detection of the pest in the State for the first time. Maryland will be performing an eradication cut, which involves removing 779 acres (1.23 sq miles) of trees to control an infestation in Prince George's County, near Washington, DC. Remaining APHIS funds were used for regulatory and control activities in infested areas, which included outreach activities and education of the general public.

Because EAB was unknown before its first U.S. detection in 2002, the program has been limited by the lack of an effective survey trap and practical, cost-effective control tools. However, APHIS and cooperating scientists have identified several promising chemical treatments and biological control agents, and program officials believe several treatment options will be available by FY 2009. Until these treatment options are available, the program is concentrating on survey, regulatory, and outreach activities.

#### 5. Exotic New Castle Disease

On October 1, 2002—after Exotic Newcastle Disease (END) was detected in backyard poultry flocks in Southern California—the California Department of Food and Agriculture (CDFA) and APHIS activated emergency response systems and began a disease eradication campaign. The Secretary transferred \$226 million from the Commodity Credit Corporation (CCC) to support this effort. APHIS, CDFA, and many other cooperating Federal, State, and local entities have carried out eradication and surveillance activities to contain the spread of the disease and eradicate it from the States where it has been detected: Arizona, California, Nevada, and Texas. In FY 2007, APHIS spent approximately \$1.1 million on outreach and surveillance activities for the Avian Health Group (AHG).

The outreach and surveillance activities of the AHG has focused on high-risk and often underserved bird owners with the goal of rapidly detecting an introduction of END or avian influenza (AI). During FY 2007, the AHG made 1,187 bilingual phone and in-person contacts (English and Spanish) explaining how to identify poultry diseases (specifically END and AI) and notify APHIS or CDFA if a bird is suspected to be infected. The AHG also conducted 15 in-person biosecurity training sessions for 15 individuals, and maintained a web site that provides information on how to recognize sick birds and the clinical signs of END and AI. This web site, which received 10,378 hits in FY 2007, includes an avian biosecurity training module and is located at [cdfa.ca.gov](http://cdfa.ca.gov). Thirty six (36) individuals completed the module and received certificates of completion from the AHG in FY 2007. Since its inception in the Fall of 2006, the AHG has conducted 71 training sessions on biosecurity, AI, and END for 1,468 animal control and law enforcement personnel in 20 California counties. In FY 2007 the AHG responded to 70 sick bird calls. Field employees collected 3,005 samples from 12,812 birds. Since February 2006, AHG employees utilized novel data collection technologies under the California Pilot (Bar Coding) Project. AHG field employees used these tools routinely as the principle data collection system.

#### 6. Infectious Salmon Anemia (ISA)

The Infectious Salmon Anemia (ISA) program was initiated with Commodity Credit Corporation funds after a December 2001 declaration of emergency. In FY 2007, the ISA program was funded by CCC carryover.

Mandatory surveillance for ISA at all Maine salmon sites continues after ISA was found in 2001. No ISA positive cages have been identified since March 2006. The impact of ISA virus on salmon farming has been significantly decreased as a result of the APHIS ISA program. The surveillance conducted through the ISA program allows for early detection and removal of infected cages, resulting in decreased infection pressure on adjacent cages and neighboring salmon farms.

APHIS is conducting a combined risk and environmental assessment to support an import protocol related to ISA that would be developed through the rulemaking process. APHIS continues to cooperate with State, industry, and Canada on depopulation, cleaning, and disinfection; epidemiology and surveillance; and biosecurity, audits, and inspections.

#### 7. Light Brown Apple Moth (LBAM)

In FY 2007, APHIS had \$15.3 million available to eradicate the LBAM from 12 California counties, including Alameda, Contra Costa, Los Angeles, Marin, Monterey, Napa, San Francisco, San Luis Obispo, San Mateo, Santa Clara, Santa Cruz, and Solano counties. The total funding available consisted of \$12.3 million that the Secretary of Agriculture transferred from the Commodity Credit Corporation (CCC) and \$3 million that APHIS redirected from a previous CCC transfer for the Exotic Newcastle Disease program. The LBAM is a devastating exotic invasive pest from Australia that attacks, and significantly damages, more than 250 plant species, primarily stone fruit, apples, citrus, vegetables, and nursery stock. If it crosses into the San Joaquin Valley, it could cause up to \$2.6 billion in losses.

To address this potentially catastrophic emergency, APHIS and the California Department of Food and Agriculture (CDFA) began a cooperative eradication program in late March 2007. This program consists of delimiting surveys, regulatory actions, pesticide applications, trapping activities, traceback and trace forward investigations, and the development of integrated pest management methods. These activities have been extremely effective, as APHIS and the CDFA have eradicated LBAM from Napa and Los Angeles Counties, and from the city of Oakley in Contra Costa County. The remaining 10 counties, which cover 500,000 acres, are still under Federal quarantine. These counties are Alameda, Contra Costa, Marin, Monterey, San Francisco, San Luis Obispo, San Mateo, Santa Clara, Santa Cruz, and Solano. In addition, the program has prevented this harmful pest from expanding beyond the initial infestation area. The program's success in this effort has convinced other States, Canada, and Mexico to relax their trade restrictions and accept LBAM-host crops from non-infested California counties without restriction. In FY 2008, the program hopes to accelerate the eradication effort through the aerial release of synthetic pheromones over the entire quarantine area. Eradication is expected in FY 2011, followed by ongoing maintenance activities in later years.

## 8. Low Pathogenic Avian Influenza (LPAI)

In FY 2004, the Secretary transferred \$13.67 million to APHIS to ensure that all AI detections were successfully eliminated and to “jump start” the H5/H7 LPAI Program to help prevent future incidents. The Agency also reprogrammed an additional \$3 million from the exotic Newcastle disease CCC request of 2002 for surveillance activities in Washington State related to the positive finding of LPAI in British Columbia.

In FY 2007, APHIS spent approximately \$3.7 million of the available funding for H5 or H7 LPAI findings in 5 States (Nebraska, New York, South Dakota, Virginia, and West Virginia). Spending covered indemnification for the value of the birds destroyed, disposal, and cleaning and disinfection as described in the H5/H7 LPAI rule. Each treatment was a cooperative effort between the State and Federal levels resulting in quick response and containment of disease.

During an April, 2007 West Virginia outbreak of low pathogenic avian influenza in turkeys, APHIS was able to successfully deliver necessary supplies and services to support the State’s activities through the National Veterinary Stockpile to the incident within 24 hours. The West Virginia outbreak presented a unique opportunity for APHIS and two of its partners, the State of North Carolina and University of Delaware, to utilize fire foam as a mass depopulation tool. The incident enabled the partners to collect valuable information and live field experience with fire foam. The information and experience will be used to further refine the use of fire foam as a humane, rapid, mass depopulation method in poultry houses.

In June, 2007 a South Dakota outbreak was identified in a non-commercial flock of breeding geese and a New York outbreak was identified in a quail farm in June, 2007. An outbreak in Virginia was identified in a turkey flock in July, 2007. Cleaning and disinfection following depopulation was completed in approximately a month in Virginia and South Dakota and two months in New York.

A Nebraska outbreak was identified in routine slaughter surveillance in a turkey flock in June, 2007. The flock was depopulated through controlled marketing. This approach allows the owner to continue selling the birds which are tested for LPAI before going to slaughter. The final group of turkeys from Nebraska tested negative for viral shedding and went to slaughter in August, 2007.

In all of the FY 2007 LPAI instances APHIS demonstrated its ability to quickly respond and contain outbreaks of this disease. The ability to respond quickly and decisively reduces costs and minimizes the possibility of trade restrictions.

## 9. Mexfly

A major goal of the Fruit Fly Exclusion and Detection (FFED) program is the eradication of the Mexican Fruit Fly (Mexfly) from the Lower Rio Grand Valley. In FY 2007, FFED spent \$403,000 in Commodity Credit Corporation (CCC) funds in response to the detection of a single mated female Mexfly in the Laredo area of Webb County. APHIS responded to the outbreak by releasing sterile Mexflies, irradiated to prevent the production of viable offspring, into the area surrounding the detection site at a rate of 375,000 to 400,000 sterile male Mexflies per square mile per week. A Federal interstate quarantine was initiated on April 24, 2007. The exclusion efforts were successful, and the quarantine ended on September 24, 2007. Because of the rapid response of the FFED program, there were no agricultural losses due to Mexfly.

## 10. Potato Cyst Nematode

In FY 2007, APHIS had available \$21.48 million in Commodity Credit Corporation funds to address Potato Cyst Nematode (PCN); \$10.2 million in carryover funds from the previous year; and \$11.28 million approved in FY 2007. PCN is a major pest of potato crops in cool-temperate areas and is one of the most difficult potato pests to control. In FY 2007, APHIS, the Idaho State Department of Agriculture, and the Idaho potato industry implemented the PCN eradication program, which encompasses extensive soil survey

and fumigation of the seven infested fields in Idaho. APHIS also continued to enforce Federal regulations designed to prevent the spread of PCN from the infested area in Idaho. APHIS and the Idaho stakeholders also implemented a statewide PCN survey, testing approximately 35,000 soil samples from the 425 fields and facilities in Idaho. APHIS continued implementation of the national PCN detection survey in 26 other potato-producing States to ensure that U.S. potato production systems are free from PCN. PCN was not found to be present outside of seven fields in the eradication zone.

#### 11. Rabies

APHIS' National Rabies Management Program works with State cooperators to contain specific strains of the rabies virus in raccoons, coyotes, and gray foxes. In FY 2005 through 2006, there were several breaches in the Oral Rabies Vaccination (ORV) barrier, which required emergency attention to prevent the spread of rabies. In FY 2006 the Secretary transferred \$2.87 million to address six high priority emergencies in Alabama, Massachusetts, New York, Ohio, Tennessee, and Texas. By using the emergency funds, APHIS was able to maintain the integrity of the strategically established ORV containment barriers in the eastern United States and Texas. In early FY 2007, the Agency used the remaining \$920,000 to complete these efforts. Without the use of these emergency funds, the Agency would not have been able to prevent heightened risks of additional barrier compromises in the future.

#### 12. Sudden Oak Death

In FY 2007, APHIS had \$5.282 million available to control *P. ramorum*, the pathogen that causes Sudden Oak Death (SOD). The \$5.282 million total consisted of \$3.1 million in appropriated funds, \$1.538 million in carryover funds from the CCC, and \$682,000 in appropriated carryover funds. The program goal is to prevent the artificial spread of *P. ramorum* from the 14 California counties where it is well established to non-infested areas nationwide. This goal is being accomplished by preventing the interstate movement of infested nursery stock and plant products from infested areas. Since January 2007, APHIS has confirmed *P. ramorum* in 21 nurseries. Of these, 7 each were found in California and Washington, 3 were found in Georgia, 2 were found in Oregon, and 1 each was found in Florida and Mississippi. The 21 detections in Calendar Year (CY) 2007 represent a 64 percent reduction from the 58 detections in CY 2006. This reduction demonstrates the diminishing presence of *P. ramorum* in the nursery system, and enables the program continue shrinking the quarantine area. In addition, none of the detections represented an establishment of SOD outside this quarantined area. This program met its FY 2007 target of detecting 57 percent of nurseries that were or most likely were infected with *P. ramorum*. The program was unable to inspect the remaining 43 percent of likely-infected nurseries.

#### Summary for FY 2007 CCC Funded Emergency Activities

	Activity	Transferred or Redirected Amounts	Prior Year Carry Over (Start of Year)	Total Available in FY 2007
1	Bovine Spongiform Encephalopathy	\$ 0	\$ 235,043	\$ 235,043
2	Bovine Tuberculosis	35,094,975	4,069,537	39,164,512
3	Citrus Canker	-3,751,484	7,487,668	3,736,184
4	Emerald Ash Borer	11,300,000	9,226,280	20,526,280
5	Exotic Newcastle Disease	-17,800,000	27,000,606	9,200,606
6	Infectious Salmon Anemia	313,818	586,740	900,558
7	Light Brown Apple Moth	15,292,713	0	15,292,713
8	Low Pathogenic Avian Influenza	0	9,934,902	9,934,902
9	Mexican Fruit Fly (Mexfly)	0	978,272	978,272

10	Potato Cyst Nematode	11,284,862	10,218,726	21,503,588
11	Rabies	0	823,251	823,251
12	Sudden Oak Death	0	1,729,538	1,729,538
	Total	\$51,734,884 a/	\$72,290,563 b/	\$124,025,447

a/ Includes \$18,113,818 in redirected balances: \$313,818 from Spring Viremia of Carp; \$17,800,000 from END.

b/ The Agency has conducted a complete review of the emergency funding account with the official Foundation Financial Information System at the end of FY 2007. Based on the results of the review, we have updated the prior year carryover column to reflect the most accurate amounts. These amounts include all prior year account recoveries as of the end of FY 2007. Any adjustments within the account were based on the review solely and in no way have been redirected by the Agency between the individual emergencies.

ANIMAL AND PLANT HEALTH INSPECTION SERVICE

Proposed Language Changes

The estimates include proposed changes in the language of this item as follows: (new language is underscored; deleted language is enclosed in brackets):

Buildings and Facilities:

- 1 For plans, construction, repair, preventive maintenance, environmental support, improvement, extension, alteration, and purchase of fixed equipment or facilities, as authorized by 7 U.S.C. 2250, and acquisition of land as authorized by 7 U.S.C. 428a, \$7,431,000, to remain available until expended.

Explanation of change:

The first change in language is to restore the entire account.

## ANIMAL AND PLANT HEALTH INSPECTION SERVICE

Buildings and Facilities

The Buildings and Facilities account funds major nonrecurring construction projects in support of specific program activities and recurring construction, alterations, preventive maintenance, and repairs of existing APHIS facilities.

Appropriations Act, 2008 .....	\$0
Budget Estimate, 2009 .....	<u>7,431,000</u>
Increase in Appropriation .....	+7,431,000

SUMMARY OF INCREASES AND DECREASES

(on basis of appropriation)

<u>Item of Change</u>	<u>2008 Appropriation</u>	<u>Program Changes</u>	<u>2009 Estimated</u>
Basic buildings and facilities repair, alterations, and preventive maintenance.....	\$0	+7,431,000 (1a)	\$7,431,000

PROJECT STATEMENT

(On basis of available funds)

Item of Change	2007 Actuals	2008 Enacted	Program Changes	2009 Estimated
Unobligated balance available, start of year	\$7,353,377	\$9,623,236	--	\$4,438,803
Recovery from prior years	291,712	--	--	--
Total, Appropriation	4,946,040	--	+7,431,000	7,431,000
Total, Available	12,591,129	9,623,236	--	11,869,803
Total obligations	-2,967,893	-5,184,433	--	-4,100,000
Total, Unobligated balance available, end of year	\$9,623,236	\$4,438,803	--	\$7,769,803

## ANIMAL AND PLANT HEALTH INSPECTION SERVICE

Justification of Increases and Decreases  
Buildings and Facilities

- 1) An increase of \$7,431,000 and 0 staff years for Building and Facilities activities;
  - a) An increase of \$7,431,000 and 0 staff years for the Buildings and Facilities account (\$0 and 0 staff years available in FY 2008).

APHIS' Buildings and Facilities account funds major nonrecurring construction projects in support of specific program activities and recurring construction, alterations, preventive maintenance, and repairs to existing APHIS facilities. Maintaining the condition and functionality of the buildings and facilities is an ongoing process, demanding effective management of significant capital resources. State and local authorities closely monitor our activities and demand repairs, upgrades, and replacements in a timely manner and in accordance with the applicable code. Public Law 100-678, Public Buildings Amendments of 1988, requires local approval of Federal construction projects regardless of whether or not the facility is on Federal property.

In FY 2009, APHIS is requesting an increase of \$7.431 million. Of the requested increase, \$4.946 million is needed to restore our FY 2007 base funding. This increase will enable APHIS to maintain existing facilities, and perform critically needed repairs to and replacements of building components, such as heating, ventilation and air-conditioning (HVAC) on a prioritized basis at Agency-operated facilities. As buildings age, major repairs or replacements, such as roofs, waste water treatment plants, and HVAC systems need to be made. Due to the environmentally sensitive nature of many APHIS facilities, closure of a facility could result if APHIS is unable to complete the required repairs.

In FY 2000, APHIS embarked upon a comprehensive Facilities Condition Assessment (FCA) program to: better understand the existing condition of facilities; strategically maintain them by identifying deficiencies and funding needs; stabilize the current facilities repair backlog; predict future maintenance needs; and, implement enhanced financial management and capital asset improvement efforts in support of the President's Management Agenda.

In FY 2009, APHIS will use approximately \$2.485 million to continue the comprehensive FCA program. Since the inception of the FCA program, 31 of the existing APHIS facilities have been assessed and their Facilities Condition Index (FCI) determined. The FCA conducted at these facilities provides APHIS with the data necessary for short and long range strategic planning for repair/replacements/renewal of the facilities and for determining the funding necessary to maintain the facilities over the course of their lives. The results of a recent FCA program review of the 31 facilities indicate that APHIS' facilities have an overall FCI of 0.22; i.e., 22 percent of the estimated replacement value for the 31 facilities has been identified as currently being deficient or anticipated to need correction in the next five years. Two of three main cost drivers identified for each facility were consistently integrity and code compliance/environmental issues. The overall FCI of 0.22 is much lower than our FY 2008 projection, due to an increase in the number of facilities from 15 to 31, including several newer facilities resulting in a lower FCI.

The requested funding will address the most severe code compliance and environmental deficiencies of APHIS' facilities. Without the requested funding, APHIS will be unable to maintain the condition and functionality of existing facilities. In addition, the backlog of deferred code compliance/environmental deficiencies identified in the assessments will increase, resulting in an increased FCI for APHIS' facilities overall. There will be an associated increase in costs each year the repairs are delayed. To ensure that APHIS maintains a current and accurate facilities portfolio over time, the program will conduct ongoing multi-year facilities reassessments on a three-year cycle.

ANIMAL AND PLANT HEALTH INSPECTION SERVICE  
Buildings and Facilities  
Geographic Breakdown of Obligations and Staff Years  
2007 Actual and Estimated 2008 and 2009

	FY 2007		FY 2008		FY 2009	
	Amount	Staff Years	Amount	Staff Years	Amount	Staff Years
<b>UNITED STATES:</b>						
Alabama.....	\$0	0	\$0	0	\$0	0
Alaska.....	0	0	0	0	0	0
Arizona.....	0	0	0	0	0	0
Arkansas.....	0	0	0	0	0	0
California.....	0	0	4,500	0	0	0
Colorado.....	153,450	0	199,250	0	154,000	0
Connecticut.....	0	0	0	0	0	0
Delaware.....	0	0	0	0	0	0
Florida.....	0	0	548,295	0	336,859	0
Georgia.....	0	0	0	0	0	0
Hawaii.....	63	0	568,350	0	85,000	0
Idaho.....	0	0	0	0	0	0
Illinois.....	0	0	0	0	0	0
Indiana.....	0	0	0	0	0	0
Iowa.....	106,659	0	208,966	0	107,000	0
Kansas.....	0	0	0	0	0	0
Kentucky.....	0	0	0	0	0	0
Louisiana.....	0	0	0	0	0	0
Maine.....	0	0	0	0	0	0
Maryland.....	667,024	0	967,846	0	1,750,000	0
Massachusetts.....	0	0	0	0	0	0
Michigan.....	0	0	0	0	0	0
Minnesota.....	0	0	0	0	0	0
Mississippi.....	0	0	705,500	0	0	0
Missouri.....	0	0	0	0	0	0
Montana.....	262,596	0	316,204	0	0	0
Nebraska.....	0	0	0	0	0	0
Nevada.....	85,000	0	0	0	0	0
New Hampshire.....	0	0	0	0	0	0
New Jersey.....	0	0	0	0	0	0
New Mexico.....	0	0	0	0	0	0
New York.....	646,217	0	0	0	0	0
North Carolina.....	0	0	0	0	0	0
North Dakota.....	0	0	0	0	0	0
Ohio.....	0	0	0	0	0	0
Oklahoma.....	0	0	0	0	0	0
Oregon.....	0	0	0	0	0	0
Pennsylvania.....	30,000	0	35,000	0	0	0
Rhode Island.....	0	0	0	0	0	0
South Carolina.....	0	0	0	0	0	0
South Dakota.....	0	0	0	0	0	0
Tennessee.....	0	0	0	0	0	0
Texas.....	942,823	0	457,188	0	240,066	0
Utah.....	0	0	0	0	0	0
Vermont.....	0	0	0	0	0	0
Virginia.....	0	0	0	0	0	0
Washington.....	0	0	0	0	0	0
West Virginia.....	0	0	0	0	0	0
Wisconsin.....	0	0	117,000	0	0	0
Wyoming.....	0	0	0	0	0	0

	FY 2007		FY 2008		FY 2009	
	Amount	Staff Years	Amount	Staff Years	Amount	Staff Years
<b>U.S. TERRITORIES:</b>						
District of Columbia.....	0	0	0	0	0	0
Puerto Rico.....	0	0	0	0	0	0
Virgin Islands.....	0	0	0	0	0	0
<b>NORTH AMERICA:</b>						
Canada.....	0	0	0	0	0	0
Mexico.....	74,061	0	796,842	0	0	0
<b>CENTRAL AMERICA:</b>						
Dominican Republic.....	0	0	0	0	0	0
Panama.....	0	0	35,665	0	0	0
Caribbean.....	0	0	0	0	0	0
Guatemala.....	0	0	223,828	0	1,427,075	0
Other, Central America.....	0	0	0	0	0	0
<b>SOUTH AMERICA:</b>						
Chile.....	0	0	0	0	0	0
Brazil.....	0	0	0	0	0	0
Colombia.....	0	0	0	0	0	0
Peru.....	0	0	0	0	0	0
Other, South America.....	0	0	0	0	0	0
<b>EUROPE/AFRICA:</b>	0	0	0	0	0	0
<b>ASIA/PACIFIC:</b>						
Guam.....	0	0	0	0	0	0
Japan.....	0	0	0	0	0	0
China.....	0	0	0	0	0	0
Other, Asia/Pacific.....	0	0	0	0	0	0
<b>Total direct obligations</b>	<b>\$2,967,893</b>	<b>0</b>	<b>\$5,184,433</b>	<b>0</b>	<b>\$4,100,000</b>	<b>0</b>

## ANIMAL AND PLANT HEALTH INSPECTION SERVICE

## Buildings and Facilities

Classification by Objects2007 Actual and Estimated 2008 and 2009

(\$000)

	<u>2007</u>	<u>2008</u>	<u>2009</u>
Other Objects:			
21 Travel and transportation.....	\$8	\$14	\$11
23 Rent, Communication, and Utilities.....	12	21	17
25 Other Services.....	2,728	4,766	3,769
26 Supplies and materials.....	10	18	14
31 Equipment.....	27	48	38
32 Land & structure.....	182	318	251
Total, other objects.....	<u>2,968</u>	<u>5,184</u>	<u>4,100</u>
Total direct obligations.....	<u>\$2,968</u>	<u>\$5,184</u>	<u>\$4,100</u>

## ANIMAL AND PLANT HEALTH INSPECTION SERVICE

## BUILDINGS AND FACILITIES

## STATUS OF MAJOR CONSTRUCTION PROJECTS

The Buildings and Facilities (B&F) appropriation funds major, nonrecurring construction projects in support of program activities and recurring construction, alterations, and repairs of existing facilities. The ongoing major construction projects as of September 30, 2005 areas follows.

National Plant Germplasm and Biotechnology Laboratory. Phases 1 & 2. Beltsville, Maryland

APHIS took beneficial occupancy of 75 percent of the new facilities in the first quarter of FY 2004. The remaining 25 percent of the project consists of the Biosafety Level (BSL) -3 Agricultural High Containment Laboratory/Greenhouse. APHIS is working on correcting a latent defect with the sewer line under the basement floor slab of this building. APHIS awarded a separate contract on September 21, 2007 to provide an alternate solution to this latent defect. Upon completion of this difficult repair, APHIS will accept the facility as functionally complete.

The National Plant Germplasm and Biotechnology Laboratory support APHIS' safeguarding efforts and eradication through the development of diagnostic technology for plant pathogens and quarantine testing protocols and programs. The laboratory will operate a BSL-3 greenhouse where diagnostic work can be conducted on dangerous plant pathogens, such as those included on APHIS' Select Agents list (mandated by the Agricultural Bioterrorism Protection Act of 2002).

Ames Master Plan for Facility Consolidation and Modernization Lab. Ames, Iowa

This project is a joint undertaking of APHIS' National Veterinary Services Laboratories and Center for Veterinary Biologics, and Agricultural Research Service (ARS) National Animal Disease Center. Bringing these programs together at one site will lead to greater efficiencies of operation, closer collaborative work and the fostering of a world-class animal disease research and service culture. The combined facilities are being referred to as the National Centers for Animal Health. ARS has the lead for managing construction of the entire Master Plan project. A groundbreaking ceremony occurred in December 2002, and Phase I was completed in FY 2004. In FY 2007, the final touches were completed to the High Containment Large Animal Facility, and the official dedication ceremony was hosted on July 3, 2007. Excavation work for Phase 2 of the Consolidated Laboratory Facilities began in September 2005, and the concrete and steel work on the three-story complex is nearing completion. The facility will house the majority of the laboratory space as well as administrative offices, training facilities, vivarium, and support services. It is scheduled for completion in January 2009.

Design of the Low Containment Large Animal Facility has been completed and the construction contract awarded. Construction should begin in March 2007 with a completion date of October 2008. Once completed, this facility will provide an integrated, multidisciplinary scientific capability combining animal disease research with the development of diagnostic tools and vaccines. With the globalization of trade heralded through the Sanitary and Phytosanitary Agreement of the World Trade Organization and its reference to a science base, agricultural animal disease needs have become more global. Modern, fully equipped facilities to accommodate and respond to these needs are essential.

Miami Airport Facility, Miami, Florida

APHIS moved into the Animal Import Center the first quarter of FY 2005. In January 2008, APHIS will have a groundbreaking a ceremony for the plant inspection portion. This APHIS "one-stop" facility houses the Agency's air cargo operations, the plant inspection stations, the canine operations kennel units, and a 100 stall animal import/export center. APHIS commodity and cargo inspection operations works extremely

closely with the Department of Homeland Security officials in service delivery to importers. ARS has the lead for managing construction of the remainder of the project.

#### Master Plan

The Agency's performance goal, relevant to our facilities, is to implement the scheduled improvements, construction, security, and maintenance as specified. Performance data will be collected through contractor reports and on-site verification. The Agency's Buildings and Facilities Master Plan strategy is to modernize existing facilities when required, as well as to properly operate and maintain existing facilities. Seven design/construction projects were awarded in FY 2007. A total of 18 repairs were successfully completed in FY 2007.

#### Facilities Condition Assessment

In FY 2000, APHIS embarked upon a comprehensive Facilities Condition Assessment (FCA) program to: better understand the existing condition of facilities, strategically maintain them by identifying deficiencies and funding needs, stabilize the current facilities repair backlog, predict future maintenance needs, and, implement financial management and capital asset improvement efforts in support of the President's Management Agenda.

Since the inception of the FCA program, 31 of the existing APHIS facilities have been assessed. The consulting firm (VFA, Inc.) tasked with assessing APHIS' facilities has automated a standard process for assessing the relative condition of assets, facilitating comparison both within and among facilities. Each asset is assigned a Facilities Condition Index (FCI). The FCI equals the sum of all code requirements divided by the current facilities replacement value. FCI is a standard measure used throughout the country. It is recommended by both the National Association of College Business Officers and the Association of Higher Education Facility Officers, and is utilized by several Federal, state, and local agencies. A recent FCA program review of the 31 facilities performed by VFA, Inc., resulted in an overall FCI of 0.22. This indicates that 22 percent of the estimated replacement value for the 31 facilities has been identified as currently being deficient or anticipated to need correction in the next five years. This overall FCI of 0.22 is much lower than our FY 2008 projection, which was based on the assessment of 15 facilities, whereas this FCI is based on the assessment of 31 facilities, which includes the assessment of newer facilities resulting in a lower FCI.

## ANIMAL AND PLANT HEALTH INSPECTION SERVICE

Summary of Budget and Performance  
Statement of Agency Goals and Objectives

The U.S. Department of Agriculture's (USDA) Animal and Plant Health Inspection Service (APHIS) was established by the Secretary of Agriculture on April 2, 1972, under the authority of the Reorganization Plan No. 2 of 1953 and other authorities. APHIS is an action-oriented agency that works with other Federal agencies, Congress, States, agricultural interests, and the general public to carry out its mission to protect the health and value of American agriculture and natural resources. APHIS strives to assure its customers and stakeholders that it is on guard against the introduction or reemergence of animal and plant pests and diseases that could limit agricultural production and damage export markets. At the same time, APHIS monitors and responds to potential acts of agricultural bioterrorism, invasive species, diseases of wildlife and livestock, and conflicts between humans and wildlife. The Agency also addresses sanitary and phytosanitary trade barriers and certain issues relating to the humane treatment of animals. Finally, APHIS ensures that biotechnology-derived agricultural products are safe for release in the environment.

APHIS has four mission priorities that contribute to the Department's overall goals and strategic objectives. As part of its strategic direction APHIS intends to strengthen components of its protection system by focusing on the following key priorities:

1. Strengthen our safeguarding system domestically and in other countries;
2. Strengthen emergency response preparedness;
3. Facilitate safe agricultural trade through international standard setting and effective management of sanitary and phytosanitary issues; and,
4. Enhance the well-being of animals covered by the Animal Welfare Act and the Horse Protection Act.

These strategic priorities are also shown below, highlighted by the corresponding Department and Agency goal.

USDA Strategic Goal	Agency Strategic Goals	Agency Mission Priorities	Functional Areas/ Programs that Contribute	Key Outcome
USDA Goal 4: Enhance Protection and Safety of the Nation's Agriculture and Food Supply	Agency Goal 1: Safeguarding the health of animals, plants, and ecosystems	<p><u>Priority 1:</u> Strengthen our safeguarding system domestically and in other countries</p> <p><u>Priority 2:</u> Strengthen emergency response preparedness</p> <p><u>Priority 4:</u> Enhance the well-being of animals covered by the Animal Welfare Act and the Horse Protection Act</p>	<ul style="list-style-type: none"> <li>• <u>Pest &amp; Disease Exclusion</u> – (Except Import/Export-International &amp; Overseas Technical and Trade Operations)</li> <li>• <u>Plant &amp; Animal Health Monitoring</u></li> <li>• <u>Pest &amp; Disease Management</u></li> <li>• <u>Animal Care</u></li> <li>• <u>Scientific &amp; Technical Services</u></li> <li>• <u>Management</u></li> </ul>	<p><u>Key Outcome 1:</u> To provide a secure agricultural production system and healthy food supply to consumers by defending against diseases, minimizing production losses, maintaining market viability and containing environmental damage</p>

USDA Strategic Goal	Agency Strategic Goals	Agency Mission Priorities	Functional Areas/ Programs that Contribute	Key Outcome
USDA Goal 1: Enhance International Competitiveness of American Agriculture	Agency Goal 2: Facilitating safe agricultural trade	<u>Priority 3:</u> Facilitate safe agricultural trade through international standard setting and effective management of sanitary and phytosanitary issues	<u>Pest &amp; Disease Exclusion</u> – (Import/Export-International & Overseas Technical and Trade Operations only)	<u>Key Outcome 2:</u> To assist agricultural producers with gaining access to and retaining foreign markets by resolving sanitary phytosanitary trade barrier issues, facilitating the export of healthy U.S. animals and animal products, and protecting expanded markets abroad

Selected Accomplishments Expected at the FY 2009 Proposed Resource Level for Key Outcome #1

*Pest and Disease Exclusion: Safeguard animal and plant resources against introduction of foreign pests and disease, while meeting international trade obligations.*

- **Fruit Fly Exclusion and Detection:** The Agency will expand sterile fly production and provide resources for additional aerial operations and organic bait spray; develop and mass produce new genetically-modified Medfly strains that could greatly enhance the efficiency and efficacy of the sterile Medfly control technique. This will result in a strengthened and expanded Medfly-free barrier zone at the Mexico-Guatemala border.

*Plant and Animal Health Monitoring: Minimize agricultural production losses and export market disruption by quickly detecting and responding to new invasive agricultural pests and diseases or other emerging agricultural health situations.*

- **Avian Influenza:** The Agency will consolidate into a single program the Highly Pathogenic Avian Influenza and the Low Pathogenic Avian Influenza line items' funding and associated activities. Formally merging resources from these two programs will simplify the administration of both programs and help them continue to progress toward controlling avian influenza.
- **National Veterinary Stockpile (NVS):** APHIS plans to permanently redirect current National Veterinary Stockpile (NVS) funding to a new, separate line item. The critical nature of the NVS indicates a need to express its activities as a separate program. APHIS will use increased funding to further equip the NVS with sufficient levels of supplies, vaccines, and equipment for responding to damaging disease outbreaks in the order of priority as assigned by the multi-agency Strategic Steering Committee.

*Pest and Disease Management: Minimize risks to agricultural production, natural resources, and human health and safety by effectively managing existing agricultural pests and wildlife damage in the U.S.*

- Aquaculture: APHIS will conduct a Viral Hemorrhagic Septicemia (VHS) surveillance plan, including sampling necessary to determine which States are most likely to be affected and where testing requirements should be the most stringent. A targeted approach of this nature will help to minimize the impact of any VHS regulations on the U.S. aquaculture industry.
- Emerging Plant Pests (EPP): APHIS will implement enhanced emerald ash borer eradication, containment, and outreach activities. The Agency will also support a permanent regulatory and management program for *Sirex noctilio*, an exotic wood-boring wasp, to manage this pest's damage and prevent its spread to new areas, protect major pine forests across the country. The EPP program will also implement activities to control the light brown apple moth (LBAM - *Epiphyas postvittana*), a devastating exotic invasive pest that can quickly spread if not contained. The LBAM could cause an estimated \$160 to \$640 million annually in crop damage and control costs if it spreads to agricultural production areas in the affected counties, and up to \$2.4 billion in California as a whole.
- Private Lands Initiative for Invasive Species: While private land and water owners suffer the consequences of invasive species, they do not have the resources or authority to implement comprehensive detection and control programs to deal with the resulting damage. APHIS will develop an invasive species prevention and management plan focusing on private lands to address these issues and enhance detection and control of invasive species on private lands.

*Animal Care: Ensure the humane care and treatment of animals covered under the Animal Welfare Act (AWA) and the various laws protecting horses.*

- Animal Care: APHIS will increase the number of Animal Welfare inspections and the percentage of licensees and registrants in substantial compliance of the Animal Welfare Act.

*Scientific & Technical Services: Develop and apply scientific methods that benefit agricultural producers and consumers, protect the health of American animal and plant resources, and sustain agricultural ecosystems.*

- Biotechnology Regulatory Services: APHIS will further strengthen its regulatory biotechnology oversight activities, develop and implement a quality assurance stewardship program, and enhance environmental review and documentation in the permitting and deregulation processes.
- Veterinary Diagnostics: APHIS will be able to actively support the laboratories in the 47 States that are currently participating in the NAHLN and increase NAHLN capability and capacity to quickly respond to an animal health emergency. Through the NAHLN, APHIS is establishing unprecedented proactive emergency avoidance as well as preparedness capabilities.

#### Selected Accomplishments Expected at the FY 2009 Proposed Resource Level for Key Outcome #2

*Pest and Disease Exclusion: Safeguard animal and plant resources against introduction of foreign pests and disease, while meeting international trade obligations.*

- Overseas Technical and Trade Operations: The Agency experts will work with foreign governments to develop regulatory infrastructure to monitor, detect, report, and manage pest and disease risks and provide technical expertise to support U.S. trade interests by resolving sanitary and phytosanitary trade barrier issues and facilitate shipments into the country. Agency experts will coordinate and implement international regulatory development projects that strengthen overseas pest and disease detection and control and promote safe trade with developing countries. Agency experts will also work with international organizations, such as International Plant Protection Convention and the World Animal Health Organization, to promote U.S. regulatory policies and influence the development of international standards. The team of agriculture and trade experts will work around the world to protect U.S. agriculture from animal and plant disease and pests.

## ANIMAL AND PLANT HEALTH INSPECTION SERVICE

**USDA Strategic Objective 4.2:** Reduce the number and severity of agricultural pest and disease outbreaks.

**USDA Strategic Objective 1.1:** Expand and maintain international export opportunities.

Strategic Objective and Funding Matrix

(On basis of current year appropriation)

	<u>2007 Actual</u>		<u>2008 Enacted</u>		<u>Increase or Decrease</u>	<u>2009 Estimated</u>	
	<u>Amount</u>	<u>Staff Years</u>	<u>Amount</u>	<u>Staff Years</u>		<u>Amount</u>	<u>Staff Years</u>
<u>Strategic Objective 4.2</u>							
Agricultural Quarantine Inspection (Approp)	\$27,531,000	303	\$26,874,000	303	185,000	\$27,059,000	303
Animal Health Monitoring & Surveillance	129,730,015	885	122,507,000	885	21,078,000	143,585,000	901
Animal & Plant Health Reg. Enforcement	10,396,000	109	12,352,000	125	1,342,000	13,694,000	132
Animal Welfare	17,473,000	183	20,498,000	200	1,024,000	21,522,000	204
APHIS Info. Technology Infrastructure	4,406,489	0	4,474,000	0	555,000	5,029,000	0
Aquaculture	1,255,000	6	6,807,000	6	(3,020,000)	3,787,000	6
Avian Influenza	0	0	0	0	59,849,000	59,849,000	159
Biological Control	9,581,000	105	9,514,000	105	644,000	10,158,000	105
Biosecurity	1,952,000	0	1,938,000	0	(1,938,000)	0	0
Biosurveillance	1,991,000	4	1,977,000	4	(1,977,000)	0	0
Biotechnology Regulatory Services	10,533,000	70	11,729,000	74	4,577,000	16,306,000	95
Boll Weevil	36,493,287	10	0	0	0	0	0
Brucellosis	8,909,000	56	9,465,000	56	(254,000)	9,211,000	56
Cattle Ticks	7,653,000	110	7,600,000	110	2,307,000	9,907,000	114
Chronic Wasting Disease	16,645,000	31	17,682,000	31	(7,291,000)	10,391,000	31
Contingency Funds	2,970,013	15	993,000	15	3,202,000	4,195,000	15
Cotton Pests	0	0	37,008,000	37	(22,846,000)	14,162,000	37
Emergency Management Systems	10,653,000	80	15,265,000	84	3,115,000	18,380,000	91
Emerging Plant Pests	85,301,254	238	126,964,000	265	18,534,000	145,498,000	297
Environmental Compliance	2,645,000	20	2,627,000	20	247,000	2,874,000	21
FAD/FMD	8,694,525	27	8,634,000	27	(4,634,000)	4,000,000	0
Fruit Fly Exclusion and Detection	50,105,139	373	60,298,000	373	7,108,000	67,406,000	398
Golden Nematode	807,000	7	801,000	7	44,000	845,000	7
Grasshopper	5,531,000	34	6,597,000	34	(2,020,000)	4,577,000	34
Gypsy Moth	4,803,000	35	4,769,000	35	225,000	4,994,000	35
Highly Pathogenic Avian Influenza	41,030,154	131	51,047,000	129	(51,047,000)	0	0
Horse Protection	497,000	5	494,000	5	5,000	499,000	5
Import/Export	6,011,000	74	11,158,000	74	2,251,000	13,409,000	74
Imported Fire Ant	1,898,000	4	1,885,000	4	273,000	2,158,000	4
Johne's Disease	12,080,000	25	10,539,000	25	(7,220,000)	3,319,000	25
Low Pathogen Avian Influenza	11,877,937	24	15,610,000	30	(15,610,000)	0	0
National Veterinary Stockpile	0	0	0	0	8,166,000	8,166,000	10
Noxious Weed	1,441,000	2	1,776,000	2	(626,000)	1,150,000	2
Pest Detection	26,471,000	116	27,530,000	116	3,833,000	31,363,000	126
Physical/Operational Security	4,190,000	0	4,161,000	0	2,718,000	6,879,000	0
Pink Bollworm	5,188,000	20	0	0	0	0	0
Plant Methods Development Labs	8,550,000	108	9,483,000	108	1,335,000	10,818,000	116
Plum Pox	2,199,000	5	2,184,000	5	1,041,000	3,225,000	5
Private Land Initiative for Invasive Species	0	0	0	0	500,000	500,000	2
Pseudorabies	4,374,000	29	2,385,000	29	147,000	2,532,000	29
Scrapie	18,475,540	79	17,978,000	79	(491,000)	17,487,000	79
Screwworm	21,257,246	36	27,559,000	36	1,238,000	28,797,000	36
Select Agents	3,501,000	18	4,221,000	18	1,776,000	5,997,000	24
Tropical Bont Tick	424,000	2	421,000	2	14,000	435,000	2
Tuberculosis	14,897,000	49	15,289,000	49	1,659,000	16,948,000	64
Veterinary Biologics	15,658,000	180	16,541,000	184	3,039,000	19,580,000	194

	<u>2007 Actual</u>		<u>2008 Enacted</u>			<u>2009 Estimated</u>	
	<u>Amount</u>	<u>Staff Years</u>	<u>Amount</u>	<u>Staff Years</u>	<u>Increase or Decrease</u>	<u>Amount</u>	<u>Staff Years</u>
Veterinary Diagnostics	22,496,000	267	23,093,000	269	10,148,000	33,241,000	273
Wildlife Disease Monitoring & Surveillance	0	0	0	0	1,300,000	1,300,000	7
Wildlife Services Methods Development	15,461,618	162	17,755,000	162	1,824,000	19,579,000	163
Wildlife Services Operations	74,127,489	530	74,919,000	530	(1,661,000)	73,258,000	472
Witchweed	1,515,000	3	1,504,000	3	28,000	1,532,000	3
Total, Strategic Objective 4.2	769,678,707	4,570	854,905,000	4,655	44,696,000	899,601,000	4,756

**Strategic Objective 1.1**

Import/Export	5,686,000	73	0	73	167,000	167,000	79
Overseas Technical & Trade Operations	0	0	0	0	19,369,000	19,369,000	87
Trade Issues Resolution and Management	12,505,000	52	12,417,000	52	(12,417,000)	0	0
Total, Strategic Objective 1.1	18,191,000	125	12,417,000	125	7,119,000	19,536,000	166
Subtotal, Available Appropriations	787,869,707	4,695	867,322,000	4,780	51,815,000	919,137,000	4,922
Unobligated balance	58,359,818						
Total, Available Appropriations a/	846,229,525	4,695	867,322,000	4,780	51,815,000	919,137,000	4,922

a/ FY 2008 General Provision 735 provided an additional \$150,000 to the Agency for the planning and design of construction of an agriculture pest facility in the state of Hawaii. The funding has been included in the Fruit Fly Exclusion and Detection line item.

## ANIMAL AND PLANT HEALTH INSPECTION SERVICE

### Summary of Budget and Performance Key Performance Outcomes and Measures

#### **USDA Strategic Goal 4: Enhance protection and safety of the Nation's Agriculture and Food Supply**

##### **Agency Goal 1: Safeguarding the health of animals, plants and ecosystems**

Key Outcome 1: To provide a secure agricultural production system and healthy food supply to consumers by defending against diseases, minimizing production losses, maintaining market viability and containing environmental damage.

Long-Term Performance Measure: A safe and efficient agricultural and environmental sector provided through:

- Pest & Disease Exclusion (Except Import/Export-International & Overseas Technical and Trade Operations)
  - Maintain Medfly-free area in Chiapas, Mexico and Guatemala.
- Plant & Animal Health Monitoring
  - Maintain zero significant introductions of foreign animal diseases and pests that spread beyond the original area of introduction and cause severe economic or environmental damage, or damage to the health of animals or humans; and
  - Maintain the levels of known, significant introductions of plant pests or diseases that are detected before they spread from the area of original colonization and cause significant economic or environmental damage.
- Pest & Disease Management
  - Increase the value of damage prevented/mitigated as a result of the ongoing control and eradication programs; and
  - Minimize the number of emerging plant pest outbreaks that are not contained within the quarantine area.
- Animal Care
  - Increase the percent of licensees and registrants in substantial compliance of the Animal Welfare Act;
  - Reduce the percent of licensees and registrants with repeat violations of the Animal Welfare Act; and
  - Increase the percent of stakeholders who find outreach activities useful.
- Scientific & Technical Services
  - Maintain the number of States that can provide necessary Federal veterinary diagnostic services for animal diseases; and
  - Increase the number of animal diseases for which there is a pure, safe, potent, and effective CVB-licensed product.
- Management Initiatives
  - Maintain an “up-time” rate of 99 percent or higher for key information technology services; and
  - Maintain at zero, the number of significant losses of critical assets, infrastructure, research and personnel.

Efficiency Measures:

- Increase the value of damage prevented or mitigated per program dollar spent;
- Reduce the time it takes to investigate and resolve violations in cases settled through APHIS administrative procedures;
- Reduce the average cost of an investigation;
- Reduce the cost to produce 1,000 sterile moths for the cotton programs; and
- Reduce the average cost to issue an animal welfare license or registration

Key Outcome 2: To assist agricultural producers with gaining access to and retaining foreign markets by resolving trade barrier issues, facilitating the export of healthy U.S. animals and animal products, and protecting expanded markets abroad.

Long-Term Performance Measures: Improved trade opportunities for U.S. exporters provided through:

- Pest & Disease Exclusion (Import/Export & Overseas Technical and Trade Operations only)
  - Increased value of expanded and retained markets, new market access, and trade facilitated.

Key Performance Targets

Performance Measure	2004 Actual	2005 Actual	2006 Actual	2007 Actual	2008 Target	2009 Target
<i>1. Pest and Disease Exclusion</i>						
Cattle Fever Tick: Number of horseback river patrols completed annually	10,371	7,420	9,170	7,872	9,500	10,000
Fruit Fly Exclusion and Detection: Square kilometers Medfly free in Chiapas, Mexico and Guatemala	70,000	70,000	97,792	98,000	98,000	110,000
<i>2. Plant and Animal Health Monitoring and Surveillance</i>						
Animal Health Monitoring and Surveillance: Number of significant introductions of foreign animal diseases or pests that spread beyond the original area of introduction and cause severe economic or environmental damage, or damage to the health of animals or humans	0	0	0	0	0	0
Pest Detection: Percent of known, significant introductions of plant pests or diseases that are detected before they spread from the area of original colonization and cause significant economic or environmental damage	94%	94%	88%	88%	89%	89%
Emergency Management Systems: Number of hours from time when decision is made to respond to animal health event to when resources have been deployed to the local incident site and are fully operational	N/A	<48 hrs	24 hrs	24 hrs	24 hrs	24 hrs
Animal and Plant Health Regulatory Enforcement: Time required to investigate and resolve violations in cases settled through APHIS' administrative procedures	257 days	209 days	200 days	143 days	143 days	143 days

Performance Measure	2004 Actual	2005 Actual	2006 Actual	2007 Actual	2008 Target	2009 Target
Animal and Plant Health Regulatory Enforcement: The number of cases closed through APHIS administrative procedures	2,248	2,647	3,014	3,636	3,500	3,600
Animal and Plant Health Regulatory Enforcement: Number of investigations of alleged violations per budget fiscal year (total plant quarantine, animal health, animal care, biotechnology, and the Swine Health Protection Act)	3,451	3,253	5,140	6,566	6,750	7,000
Dollars: Average cost per investigation	\$2,590	\$2,861	\$2,003	\$1,583	\$1,886	\$1,818
<i>3. Pest and Disease Management</i>						
Value of damage prevented/mitigated as a result of the ongoing control and eradication programs	N/A	\$79 million	\$451 million	\$751 million	\$871 million	\$956 million
Value of damage prevented/mitigated per program dollar spent for ongoing control and eradication programs	N/A	\$1.12	\$3.22	\$3.61	\$3.16	\$2.78
Emerging Plant Pests: Pests/Diseases not contained within the quarantine area	3	2	3	1	1	1
Wildlife Services Operations: Number of damaging strike events prevented	N/A	480	518	660	660	660
<i>4. Animal Care</i>						
Animal Welfare: Percent of repeat violators reinspected for compliance with the Animal Welfare Act within the prescribed timeframe to ensure the humane treatment of animals	N/A	N/A	N/A	60%	80%	80%
Number of animal welfare inspections	14,862	16,474	18,600	18,343	19,000	19,500
Percentage of licensees and registrants in substantial compliance with the Animal Welfare Act	N/A	N/A	N/A	97%	90%	91%
<i>5. Scientific and Technical Services</i>						
Biotechnology Regulatory Services (BRS): Percent of facilities in compliance with permit conditions (# of permits with no violations/ # of active permits)	N/A	97.5%	98.0%	97.0%	98.0%	98.0%
Unit: BRS site inspections	545	578	539	477	555	555
<i>6. Management Initiatives</i>						
APHIS Information Technology Infrastructure: Percentage of time APHIS' key services (e.g., e-mail, Oracle applications) and assets are available (Up-Time)	N/A	99.5%	99.6%	99.8%	99.8%	99.8%
Physical/Operational Security: Number of significant losses of critical assets, infrastructure, research and personnel (due to security lapses)	0	0	0	0	0	0

## ANIMAL AND PLANT HEALTH INSPECTION SERVICE

Full Cost by Functional Area  
(On basis of appropriated funds)Pest and Disease Exclusion

PROGRAM ITEMS	DOLLARS IN THOUSANDS		
	FY 2007	FY 2008	FY 2009
Agricultural Quarantine Inspection	22,575	22,036	22,188
Cattle Ticks	6,275	6,232	8,124
FAD/FMD	7,130	7,080	3,280
Fruit Fly Exclusion and Detection	41,086	49,444	55,273
Overseas Technical and Trade Operations	0	0	15,883
Screwworm	17,431	22,598	23,614
Tropical Bont Tick	348	345	357
Trade Issues Resolution and Management	10,254	10,182	0
Import/Export	9,592	9,150	11,132
Program Operational Costs	20,980	23,244	25,582
Indirect Costs	4,196	4,649	5,116
Total Pest and Disease Exclusion	139,867	154,961	170,549
FTEs	1,050	1,050	1,093

Performance Measure:	Value of expanded and retained markets, new market access and trade facilitated	~+2.4 billion	+1.5 billion	+1.5 billion
Performance Measure:	Number of severe outbreaks of exotic fruit flies on the U.S. mainland	3	2	2
Performance Measure:	Fruit fly free area in Mexico and Guatemala	98,000 Km2	98,000 Km2	110,000 Km2
Units:	Number of medfly pupae produced weekly (in billions)	1.7	1.8	2

Animal and Plant Health Monitoring

PROGRAM ITEMS	DOLLARS IN THOUSANDS		
	FY 2007	FY 2008	FY 2009
Animal Health Monitoring & Surveillance	106,379	100,456	117,740
Animal and Plant Health Regulatory Enforcement	8,525	10,128	11,229
Avian Influenza	0	0	49,076
Biosurveillance	1,633	1,621	0
Emergency Management Systems	8,735	12,518	15,072
Highly Pathogenic Avian Influenza	33,645	41,858	0
National Veterinary Stockpile	0	0	6,696
Pest Detection	21,706	22,575	25,718
Select Agents	2,871	3,461	4,918
Wildlife Disease Monitoring & Surveillance	0	0	1,066
Program Operational Costs	33,566	35,235	42,350
Indirect Costs	6,713	7,047	8,470
Total Animal and Plant Health Monitoring	223,772	234,899	282,334
FTEs	1,343	1,361	1,450

Performance Measure:	Number of significant introductions of foreign animal diseases or pests that spread beyond the original area of introduction and cause severe economic or environmental damage, or damage to the health of animals or humans	0	0	0
Performance Measure:	Percent of known significant introductions of plants pests or diseases that are detected before they spread from the area of original colonization and cause significant economic or environmental damage.	88%	89%	89%
Units:	Number of investigations conducted in support of the APHIS mission	6,566	6,750	7,000
Unit Cost:	Average cost of an investigation	\$1,583	\$1,866	\$1,818

**Pest and Disease Management**

PROGRAM ITEMS		DOLLARS IN THOUSANDS		
		FY 2007	FY 2008	FY 2009
	Aquaculture	1,029	5,582	3,105
	Biocontrol	7,856	7,801	8,330
	Boll Weevil	29,924	0	0
	Brucellosis	7,305	7,762	7,553
	Chronic Wasting Disease	13,649	14,500	8,521
	Contingency	2,435	814	3,440
	Cotton Pests	0	30,347	11,613
	Emerging Plant Pests	69,947	104,110	119,308
	Golden Nematode	662	657	693
	Grasshopper	4,535	5,409	3,753
	Gypsy Moth	3,938	3,911	4,095
	Imported Fire Ant	1,556	1,545	1,770
	Johne's Disease	9,906	8,642	2,722
	Low Pathogen Avian Influenza	9,740	12,800	0
	Noxious Weeds	1,182	1,456	943
	Pink Bollworm	4,254	0	0
	Plum Pox	1,803	1,791	2,645
	Private Land Initiative for Invasive Species	0	0	410
	Pseudorabies	3,587	1,956	2,076
	Scrapie	15,150	14,742	14,339
	Tuberculosis	12,216	12,537	13,897
	Wildlife Services Operations	60,785	61,433	60,072
	Witchweed	1,242	1,234	1,256
	Program Operational Costs	48,055	54,700	49,489
	Indirect Costs	9,611	10,940	9,898
Total Pest and Disease Management		320,369	364,669	329,927
FTEs		1,307	1,347	1,308

Performance Measure:	Value of damage prevented/mitigated as a result of the ongoing control and eradication programs	\$751 M	\$871 M	\$956 M
Unit Cost:	Value of damage prevented/mitigated per program dollar spent for ongoing control and eradication programs	\$3.61	\$3.16	\$2.78
Performance Measure:	Emerging Plant Pest pest/diseases not contained within the quarantine area	1	1	1
Units:	Number of damaging strike events prevented	660	660	660
Unit Cost:	Dollars saved by U.S. Aviation industry by preventing damaging strikes (\$147,000/strike)	\$80.8 million	\$80.8 million	\$80.8 million

Animal Care

PROGRAM ITEMS		DOLLARS IN THOUSANDS		
		FY 2007	FY 2008	FY 2009
	Animal Welfare	14,328	16,809	17,648
	Horse Protection	408	405	409
	Program Operational Costs	2,696	3,149	3,303
	Indirect Costs	539	630	661
	Total Animal Care	17,970	20,992	22,021
	FTEs	188	205	209

Performance Measure:	Percent of facilities in substantial compliance at the most recent inspection	97%	90%	91%
Units:	Number of Animal Welfare inspections conducted	18,343	19,000	19,500
Unit Cost:	Cost per Animal Welfare inspection	\$953	\$1,112	\$1,083

Scientific and Technical Services

PROGRAM ITEMS		DOLLARS IN THOUSANDS		
		FY 2007	FY 2008	FY 2009
	Biosecurity	1,601	1,589	0
	Biotechnology Regulatory Services	8,637	9,617	13,371
	Environmental Compliance	2,169	2,154	2,357
	Plant Methods Development Labs	7,011	7,776	8,871
	Veterinary Biologics	12,840	13,564	16,056
	Veterinary Diagnostics	18,447	18,936	27,258
	Wildlife Services Methods Development	12,679	14,559	16,055
	Program Operational Costs	11,594	12,475	15,360
	Indirect Costs	2,319	2,495	3,072
	Total Scientific and Technical Services	77,296	83,166	102,398
	FTEs	807	817	862

Performance Measure:	Percent of facilities in compliance with permit conditions (# of permits with no violations/ # of active permits)	97%	98%	98%
Units:	Biotechnology Regulatory Services (BRS) site inspection	477	555	555
Unit Cost:	Cost per BRS site inspection	\$1,700	\$1,550	\$1,550

**Management Initiatives**

PROGRAM ITEMS		DOLLARS IN THOUSANDS		
		FY 2007	FY 2008	FY 2009
	AITI	3,613	3,669	4,124
	Physical/Operational Security	3,436	3,412	5,641
	Program Operational Costs	1,289	1,295	1,786
	Indirect Costs	258	259	357
	Total Management Initiatives	8,596	8,635	11,908
	FTEs	0	0	0

Performance Measure:	Number of significant losses of critical assets, infrastructure, research and personnel	0	0	0
Performance Measure:	Percentage of time APHIS's key services (e.g., e-mail, Oracle applications) and assets are available (up-time)	99.8%	99.8%	99.8%

Total Pest and Disease Exclusion	139,867	154,961	170,549
Total Animal and Plant Health Monitoring	223,772	234,899	282,334
Total Pest and Disease Management	320,369	364,669	329,927
Total Animal Care	17,970	20,992	22,021
Total Scientific and Technical Services	77,296	83,166	102,398
Total Management Initiatives	8,596	8,635	11,908
Rescission P.L. 110-xxx	0	6,116	0
Total for All Functional Areas	787,870	873,438	919,137

a/ FY 2008 General Provision 735 provided an additional \$150,000 to the Agency for the planning and design of construction of an agriculture pest facility in the state of Hawaii. The funding has been included in the Fruit Fly Exclusion and Detection line item.